EDUCATIONAL REVIEW

NOVEMBER, 1895

I

CONTEMPORARY EDUCATION IN FRANCE

What may be termed the heroic age of the organization of public instruction in France closed several years ago. Nearly all the great reforms have been accomplished; and for some time, at least, it is probable that we shall content ourselves with merely perfecting, by measures of detail, the regulations and laws which govern our three grades of education. Just now, we have nothing which resembles enterprises of general reform like those which have been successively elaborated by the American Committees of Ten and of Fifteen. Yet we do not remain inactive, and the following are some of the academic events of the year which has just closed.

I

In the field of higher education we have not yet been able to obtain a law officially recognizing a number of our groups of faculties as universities—a name that some of them have already taken on in current language. But we are able to say that, by a continuous series of progressive steps, the majority of our centers of higher education have acquired all the essentials of what constitutes a university; so that the thing is at hand, if not the name. On the day, which appears to be approaching, when the law will at last confer upon them a definite civil status by denominating them universities, the reform will be more verbal than actual; it will be a mere formality. In fact our *Corps de Facultés*, as they have been

legally termed since the decree of 1893, possess all the conditions of genuine university life. First, on the side of the instructors, there is a General Council, with the rector as chairman, composed of the deans of the faculties and two professors from each faculty, chosen by their colleagues. This body represents the common life of the university and is the instrument for the federation of the various schools associated and grouped together. Each year the branches of instruction grow more numerous and varied. The list of subjects has almost doubled within the past twenty years. We have, too, a cautious application of the system of elective studies, which is used so largely in America; so that, for instance, a student in the Faculty of Letters may substitute for a course in literature one given by the Faculty of Law, of Medicine, or of Science. There has been constant increase in the number of laboratories, which, while they may not equal those of America in the luxury of their appointments, are yet daily better equipped and enriched with all the instruments necessary for scientific work. On the side of the students there have sprung up associations and societies, which meet for mutual study or amusement. They assess themselves to establish libraries, reading rooms, and sometimes popular lectures. All the elements of academic life, all the germs of a noble and powerful effort in the sphere of the higher education, have gradually grown up in our *Corps de Facultés*, and really there is nothing more to be done, except to call them by another name, to make them real universities at the height of their scientific and social usefulness.

There is good reason to hope that our Groups of Faculties will not wait much longer for the name which they merit. In fact, the ministry, on June 18, 1895, presented to the Legislature a public bill relative to the constitution of the universities, which seems to me destined to receive a majority vote because it has carefully avoided striking against the rocks on which former plans were stranded. Hitherto the idea which had prevailed in the government councils was to create only a very small number of universities, six or seven at the

utmost, for all France. In America, the great name of university is given right and left, and apparently there is no fear of degrading it by allowing its use by institutions that have only nebulous relations with higher education. In France, by an opposite tendency, the Ministry of Public Instruction preferred to adhere to a rigid limitation; to make the centers rarer, that they might be more brilliant. But this restrictive policy, which perhaps is more in harmony with the real interests of science, had the weakness of wounding the self-respect and lowering the position of those faculties which were not granted the title of university. So the original plan succumbed to the complaints and opposition of those cities that fancied themselves injured in their academic interests. The new plan recognizes all claims, and this will assure its success. No one of the Groups of Faculties actually existing is sacrificed. There will be as many French universities as there are centers of higher education already established, fifteen, namely: Paris, Lyons, Bordeaux, Toulouse, Montpellier, Aix and Marseilles, Lille, Nancy, Poitiers, Rennes, Caen, Dijon, Grenoble, Besançon, and Clermont. Does this mean that these fifteen universities will be equal; that all will possess the same importance? No. In the first place the new system under which they will be summoned to live leaves them, from the standpoint of the character and number of the branches of instruction which they give, in precisely their present condition; so that some, the most complete, will number four faculties, while others will have but three; Besançon and Clermont will have only one each. But, unequal from the beginning of their constitution, the future universities are destined to become still more so in the immediate future. For it is specified in the new plan that they shall themselves collect and use at their pleasure, on the responsibility of the Minister of Education, a part of the fees paid by the students. These receipts will be used to develop and multiply professorships, to increase and enrich laboratories and academic apparatus. Now it is only in the most popular universities that the fees of the students will be sufficiently large to permit any thought

of the increase of material equipment or any improvement in number of teachers. The less favored institutions will only be able to maintain what they already possess. So the law will introduce a principle of competition, and consequently of inequality, into the organization of the various universities, by making them rich in proportion to the number of pupils they succeed in attracting, and by granting them the free disposal of their wealth.

On the other hand, there is no doubt that the subsidies of Communes and Departments, as well as the gifts of private individuals, will go by preference to certain universities. Those which are situated in the most important cities will gain the ascendency over their rivals by the number of their professors and their students. All the universities will undoubtedly be government universities, because the Government will secure to them the annual endowment entered in the national budget, which is about twelve millions. But, invested with corporate rights, as the *Corps de Facultés* have been since 1893, they will be able to receive gifts and legacies, to profit by the liberality of private individuals, as well as that of public bodies. And though, less fortunate than the United States, we have not yet witnessed the appearance of the race of generous donors, such as Leland Stanford, the Vanderbilts, and so many others, who have flung millions of dollars into the vaults of American universities, there is reason to hope that our French universities also will in the future find some private benefactors. The most favored among them, at least, will do honor to their native land, which, in the Middle Ages, had the glory of being the mother of the universities of all countries. Our democracy, in spite of its leveling and sometimes lowering tendencies, will know how to understand the necessity and encourage the development of a system of higher education, which shall not only labor for the advancement of knowledge, but in our unsettled times, darkened by false doctrine and agitated by the ignorant, shall also fulfill a social mission, by informing the minds and steadying the convictions of the people at large.

This adjustment of social and political standards, which must henceforth be one of the chief objects of the higher education, is illustrated this year in the reform of our doctorate of law. It is well known that the conditions under which the study of law is pursued in France are much more rigorous than those prevailing in America. To be admitted to the examination here, it is necessary to be provided with the bachelor's diploma taken in the classical course. The bachelor's degree in science does not suffice to procure admittance. The course of legal study itself is long and laborious; it lasts at least five years, two years for the baccalaureate, one for the licentiate, two more for the doctorate. Until now we have had but one form of the doctorate of law, henceforward there will be two: the doctorate of legal science and the doctorate of political and economic science. The object of the reform which the decree of April 8, 1895, sought to establish is at once obvious. The idea was by no means to lower the standard of the legal diplomas, which are specially sought among us because they confer a privilege with regard to the military service. For a student of law, as well as a student of medicine, who has spent a year in the barracks is exempt from the other two years with the regiment prescribed for all Frenchmen, if he has obtained the title of doctor before attaining the age of twenty-seven. Undoubtedly the new system concerning the doctorate will facilitate the admittance to the degree of a certain number of young men who care little for the arcana of the Roman law, and have more inclination for modern law. But although there may henceforward be two roads opened to lead to the same goal, it is not possible that the faculty of law will permit the degrees which they confer to be lowered in their hands. The new doctors of political and economic science will have pursued somewhat different studies from those of their companions, the doctors of legal science; but they will work as much, and their knowledge, although dissimilar, will be equal. In law, as was the case in the reform of secondary instruction, which has placed upon an almost equal footing the classic Greek and Latin education, and the modern one of the living languages and science, it must

have been deemed possible to modernize the course of study without enfeebling it. It must have been felt, especially, that it was needful to develop more and more the sciences which have great social importance—political economy, finance, legislation, and industrial, rural, and colonial economy. These are the branches of knowledge which it is desired, in some way, to emancipate and withdraw from the tutelage of their elders the sciences of pure law, to which they have become equal in importance.

It may be important to note other points in our reform of the doctorate of the law. First, in order to permit freedom of study, the principle of elective studies has been admitted to a certain extent. The student of legal science can choose between the course of administrative law or of international public law. In the same manner the student of political science has the choice between industrial legislation, rural legislation, and colonial legislation, which are so many distinct branches of instruction in the faculty of law, and for these same studies he has the right to substitute, as an equivalent, a course in history or economics taught in another faculty. On the other hand, a fortunate tendency is manifesting itself in the direction of a more practical method of instruction; one which stimulates the student's activity more and brings him in closer contact with his teachers. He is not merely offered the teacher's lectures, given *ex cathedra*, but he is also summoned to *conferences* or seminars, where practical exercises, examinations, written papers, studies of authors and of texts, are appointed and discussed; and where special questions connected with the topics of the lectures are minutely examined. These *conferences*, which are directed by the professors and which do not include more than a few of the most advanced students, are not made obligatory, but the students are encouraged to attend them: first by the profit which they will derive from them, and next because the work done in the *conferences* will be taken into account at the time of final examination. Therefore the happiest results may be expected from the modifications introduced into the instruction of our faculties of

law, and it is to be hoped that a large number of industrious students will bear witness to their excellence by seeking successively, as they are entitled to do, both doctorates—the legal and the political.

II

We do not misuse educational statistics in France. Our department of secondary education publishes none. Those of the higher education appear only every tenth year, the last ones being issued in 1878 and 1888. But the directors of our primary education are less niggardly of information. They issue annually a summary of statistics under the title of *Résumé des États de Situation de l'Enseignement Primaire*, and every five years they prepare a huge volume which notes with precision all the facts, all the details, all the movements of progress, or sometimes of retrogression, which concern our primary schools. The last volume of these great quinquennial statistics has been published this present year; it covers the period from 1887 to 1892, and, like its predecessors, bears witness to the minute care with which M. Levasseur, and his coadjutors on the statistical commission of which he is the president, perform their work. There is nothing in these French statistics which lays claim to anything beyond a numerical statement and a commentary rigidly confined to the figures printed. The admirable reports of the Bureau of Education in Washington, in which Dr. Harris annually accumulates his treasures of information, contain in their complexity and their wealth of documents of every kind, information upon all possible subjects. They are, as the editor of the EDUCATIONAL REVIEW recently said, veritable encyclopedias. M. Levasseur's reports, on the contrary, eliminate from the authorities used everything which does not properly belong to the domain of statistics. Discussion is either omitted entirely, or is limited to making intelligible the numerical tables, which fill three-quarters of the volume.

Evidently it would be impossible to review here all the interesting information which a large quarto of 350 pages

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brings us concerning the official statistics of 1887–92. The number of children to be educated, the means of instruction, inspection, schools, classes, teachers, preparation of teachers, the pupils, the auxiliary institutions, the results of the education, the financial statistics, the expenses of primary education, are passed in review. But, without entering into the details, it may be said that all these figures have their eloquence, and that they testify loudly in behalf of the continuation of the efforts to secure to French democracy an academic organization worthy of it. True, in 1892 we had only 6,263,049 children in our primary schools of every grade, infant and elementary, public and private (including Algeria), while the United States numbered 14,165,182 (statistics of 1892). But the population of the United States is 64,334,561; that of France and Algeria, 42,267,924. Besides, it must be taken into consideration that the primary-school course in America is longer than it is with us. There it usually includes eight years, from the age of six to that of fourteen, while in France it is only six years long at the utmost. Therefore it does not seem that, from the standpoint of the number of pupils, our situation is greatly inferior. But it is inferior so far as concerns the proportion of the children attending the public schools. In America out of 100 pupils, 91 go to the public schools, only 9 to the private ones; in France out of 100 there are about 77 pupils in the first category, 23 in the second.

Certainly we have not as brilliant a step forward to record during the period from 1887–92 as America has. In the majority of points, however, the progress is marked. In five years 2705 schoolhouses have been built; there are only 50 small parishes without schools. The number of classes, that is of sections, of schools intrusted to a special master has perceptibly increased; out of 100 schools there were, in 1887, 163 classes where in 1892 there were 170. In 1887 we had in France and in Algeria 147,874 male and female teachers in the primary schools (infant, elementary, and upper); in 1892 there are 7553 more; that is, a total of

155,427. Of this number 107,626 belong to the public schools —not all are lay, it is true, since there are 132 male and 12,712 female religious teachers. On the other hand, 47,801 persons teach in private schools, lay or confessional. Thus it appears that about one-third of our school masters and mistresses still give instruction for the religious corporations.

One of the points on which we have the most reason to congratulate ourselves is the condition of the upper primary schools: 45,599 pupils in 1892 instead of 38,441 in 1887. It is interesting to remark, in connection with the inquiry instituted concerning the destination of the young people who graduated from these schools, that a very large proportion of them enter manufacturing, commerce, and agriculture.

It is difficult to establish by statistics the positive results of the instruction given in the schools. Still we may appeal to two kinds of evidence: (1) the number of conscripts who, at the time of entering the barracks, assert that they know how to read or know how to read and write; (2) the number of husbands and wives who have signed their marriage contract, In both lines there is progress. The number of conscripts who knew how to read was 89.7 of 100 in 1888 to 92.6 in 1891; that of women who signed their marriage contract, 79.8 of 100 in 1885 to 87.4 in 1890. Another indication which is not to be despised is the increase in the number of certificates granted to children who have completed the elementary course of study. These numbered 145,134 in 1887, and 175,675 in 1892.

But where statistics are most significant is when the point in question is to estimate the expenditures and to exhibit the budget of the schools. According to the last report of the Bureau of Education at Washington, the annual expenditure in the United States for the public schools amounts to about 156,000,000 of dollars, that is nearly 800,000,000 of our money. The average outlay for each pupil there would be $15; that is nearly 75 francs. Whatever reproaches some of our fellow-citizens have addressed to the French Republic concerning its extravagant inclinations with regard to primary instruction,

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we are far from approaching the enormous sums which are permissible only to the wealth and prodigality of the Americans. The total of the expenditures, according to the statistics of 1892, has increased in five years about 13,000,000—from 173,000,000 in 1887 to 186,000,000 in 1892; that is 34.29 francs per pupil in 1887, and 39.26 francs in 1892. True, we must add the cost of building and furnishing the public schools, for which, from 1878 to 1893, we used 594,500,000 francs, plus 51,000,000 for the normal schools alone.

One cannot overestimate the importance of such financial exertions in a country which must also meet overwhelming military expenses, and which annually expends more than a thousand million francs for the army and the navy. France is now covered with schools. For twenty years the Government has multiplied its sacrifices. This exertion will not have been futile, if, as I hope, and as the Congress recently held at Havre seems to prove, private initiative and the enthusiasm of the voluntary societies come to the aid of public education.

The Congress of the Societies of Instruction and Popular Education met at Hâvre on the 30th of August. It did not lack official patronage, since the Minister of Public Instruction, M. Poincaré, twice made eloquent addresses, and President Faure honored one of the meetings with his presence.

Moreover, its discussions were directed by the eminent Rector of the University of Paris, M. Gréard, and the distinguished Director of Primary Education, M. Ferdinand Buisson, took part in the deliberations. The Congress, which numbered more than four hundred members, some of whom were foreign delegates, was primarily a manifestation of the work of private initiative in education. The Society of Scientific Education by Object Teaching took the lead in the movement, and organized the gathering. The programme of the questions to be treated comprised four parts: (1) courses for adults, (2) popular lectures, (3) education by object teaching, (4) academic patronage. But, in reality, beneath all these four different forms was one and the same question, which was

presented for the consideration of the Congress—"How can we continue and complete the work of instruction and education commenced by the primary school?" In fact, it is one of the dominant movements of the present hour to seek means of developing, or at least of preserving in adults, the instruction and education already received by the children and, as it were, build the second story of the primary schools. The primary school undoubtedly does all that it can; but pupils leave it when they are twelve years old. At this age it could have inculcated only the elements of knowledge, the germs of morality, which will not bear fruit unless care is taken to cultivate them. From the time of leaving school until the entrance upon the life career, that is, from twelve to twenty-one, is a difficult period, during which the child, having become a youth, is exposed in his life as an apprentice, journeyman, workman, to all the evil impressions of the outside world. There is no more lack of taverns and vicious newspapers in France than in America. Besides, the outlines of knowledge which the school has communicated are in danger of being effaced from the mind, unless the opportunity is furnished to develop them. It is to fill this gap that the volunteers who arranged to meet at Havre seem disposed to devote themselves with confidence and ardor. The first thing to be done is to reorganize the adult courses which, after having been in a flourishing condition several years ago, have gradually declined. The problem is to multiply them, render them more efficient by adapting them to the needs of local industries, and to impress upon them a character of practical utility. The Government undoubtedly will consent to encourage, by financial aid, the courses for adults, and to pay the teachers who will take charge of them, but we cannot expect to reach solid results unless the municipalities and the free associations also give them their co-operation. It is the same with the popular lectures which, for several years past, have become acclimated in our little villages. On Sundays the teacher assembles men and women of all ages in the schoolroom and, either by readings from the great

writers or familiar talks about national history, moral virtues, and civic plans, on the new methods of agriculture, manufacturing processes, or great scientific discoveries, he interests and instructs them. One condition of making these lectures a success is, that they should be not only instructive, but attractive. Hence, the importance of the third question considered by the Congress, that of teaching by objects.

For all this propaganda of instruction and education, the Congress showed that it desired especially to appeal to individuals, to private associations, and notably to what has been termed "the academic patronage"—that subtle feeling of social and educational fraternity, which will offer young people a refuge and a protection against the evil tendencies of life, create public libraries, clubs for amusement, reunions of all sorts; and strive, in a word, to keep children and grown people in the healthful atmosphere of an educational environment which will enhance the beneficent influences of the family.

Many useful ideas and ingenious views were brought forward at the Havre Congress; but the principal result will be the arousing of public sentiment to co-operate with the government in the work of public education. "The Congress," M. Poincaré said in his closing address, "has once more given the measure of what French democracy gains from forces ever ready; it has shown gathered around the Government, in a generous cordon, fathers of families, teachers of every class, citizens of all conditions—all equally convinced that, if a nation is to prosper and increase, it must place in the first rank of its daily solicitude the education of youth."

GABRIEL COMPAYRÉ

RECTEUR D'ACADÉMIE,
POITIERS, FRANCE

II

INDUSTRIAL TRAINING AS APPLIED TO INDIAN SCHOOLS[1]

No system of American training or education is right that does not seek to enlarge and develop all the abilities and open the way to widest opportunities for the individual, to remove prejudice against labor, and to give the courage to compete. The school can be just as potent an engine to create prejudice, stifle ability, and narrow opportunity as it can be to extend those qualities. This needs no argument.

We have an Indian problem because the Indian is ignorant of the language of the country, and industrially untrained to take his place among our other people. The problem will remain as long as the Indians are continued in masses apart from our other people, because by such massing they are held to their industrial inability and their ignorance of our language. Having for generations failed to induct them into the nation by our attempts to educate and train them separately in tribes, and having fully demonstrated that that method only leaves them tribes, we should now make all our future attempts at education and industrial training for them, positive influences to bring them into the nation through giving them the full use of the language of the country, and the full ability to meet and compete industrially with the other inhabitants.

In justice to itself, the Indians, and all the people, the Government should have but one aim in all it may do for them, and that aim to transform them individually into worthy, productive American citizens. The Indian is a man like other men. He has no innate qualities that condemn him either to prolonged separation from other men or to generations of slow

[1] A paper read before the Department of Industrial Education of the National Educational Association at Denver, Colo., July 11, 1895.

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development. He can acquire all the qualities of good, useful citizenship in about the same time that other men acquire them. He is hindered or facilitated in acquiring them only by conditions and environments that would equally hinder or facilitate other men in acquiring the same qualities.

If the Indian has not had the same chance to acquire industrial knowledge and the language of the country, he is not to be blamed for not having these qualities equally with us. If he is not acquiring these qualities now as rapidly as he might and ought, it is because the contrivances we force upon him hinder. In all we do for him, we must necessarily consider first the English language; for without that he is condemned to perpetual disability. How is a usable knowledge of any language to be quickest and best gained? Manifestly, through association with those who use it. Neither books nor a special teacher are necessary. The subject, placed where he can hear the language constantly in use, gets the language.

Wise American parents, desiring their children to learn a foreign language, send them into the foreign country or into constant association with that language. Why not, then, when the school is so wide and free, contrive that the Indian have this same opportunity to learn the almost universal language of the country in which he lives, and which he must learn in order to be at one with the great body of its people? Upon his having a usable knowledge of the English language hinges all his success in his industrial training. Ignorant of the language, he is walled out industrially and in every other way.

Successful industrial training follows in the same line. His industrial needs are nothing more and nothing less than sufficient skill in some industry to enable him to successfully compete with other people. How is this competitive skill to be acquired? There seems no other proper way but to follow exactly the same lines indicated to be necessary in acquiring the language. The best agricultural school is the agriculturist on his own farm, where the daily pressure of necessity to get the work done, and the living and something more,

hinge upon industry, skill, and intelligent management. In the same way, to make a blacksmith or a carpenter, the blacksmith shop and the carpenter shop, with a competent head and surrounded by competent workmen, is the true place. Working with the farmer and the mechanic, the Indian learns what a real day's work is, and becomes in every way a part of the situation. He acquires another most essential quality, seldom or never taken into consideration in estimating his needs, and that is the courage of civilization, the courage of language, the courage of industry.

At his home in his tribe, he measures himself and his needs only by the conditions of progress there, simply because he has no other experience or observation to guide. Gauging his needs by these weak examples, he is in no sense prepared for competition with the more skillful, aggressive, and productive race. This is why he goes to the wall when brought into such competition. The courage and ability for the higher competition are only to be acquired by actual experiences in that competition. There is, therefore, all the greater need that every part of the education of the Indian should be carried forward under the association and competition indicated. The tribe and all tribalizing influences are the enemies of the individual, if he is to become American and a citizen; for, immersed in the tribe, how is the individual to take on anything foreign to the tribe?

We have failed in our efforts for the Indian in the past, and are not materially successful now, because we have not recognized that the Indian is to be merged into our American system. The Indian is to save his life by being consumed and lost in America, which is comparatively a simple matter. In other words, the best way to get civilization into the Indian is to get the Indian into civilization; ergo, the best way to get industry and industrial skill into the Indian is to get the Indian into industry and industrial skill. Attempting to get civilization, industry, skill, and English into the Indian, by keeping him out of and away from these, is the cause of all our failures.

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The Indian system, or an Indian system, is the real barrier to the Indian's progress toward becoming a civilized, useful man and citizen. When we established the reservation system, we got out the Indian's coffin, and every plan we adopt which makes him a specialty, crowds him into that coffin. If there were no Indian reservations, no Indian Bureau, no Indian annuities, no Indian schools, and the Indian had had to "root hog or die" like the rest of us, from the start, there would be more live Indians to-day than there are, and we should not be confronted with an Indian problem. We, and not the Indian, are to blame for his being a burden. The seven to ten millions of money spent yearly in the Indian service is an expenditure of our own creation, and very much more in the interests of the white man than the Indian.

We must not depend too much on industrial training in Indian schools, however practical or however promising the conditions. The best Indian industrial school can only inaugurate the industrial idea and give a smattering of industrial usefulness. The bone and sinew of real industrial worth come only through actual competition with the real industrial bread-winner. In order that we may not, in our industrial training of the Indian, get too far away from this vital principle, the most practical real mechanics and farmers are our best industrial-school instructors. All the school shops should be like the shops of regular everyday mechanics. The best division of time is half day at industries and half day at books. One recompenses the other and saves from weariness.

The subject should generally be held to one trade, so that there may be something of the old apprenticeship system, through which the greatest skill will be reached. The largest results that may be secured through industrial-school training for Indian youth will only be obtained through locating the schools in our civilized and industrial communities, so that the example of our own industry and skill may be always before the pupils. There need be no limit to the variety of industries taught. Distribution of occupation will aid to distribu-

tion of Indians and the consequent breaking up of Indianism and tribalism.

The question is often asked, "Can the Indian acquire mechanical skill and habits of industry?" and too often is answered in the negative by self-constituted judges who are without experience and generally with little or no observation. A man of sixty, born and raised on the borders of an Indian reservation in western New York, who had seen Indians almost every day of his life, on visiting Carlisle said to me, "You may be able to do something with the Western Indians, but the Indians of New York are utterly worthless and incompetent. They can pick a few berries, dig a little sassafras root, make a few beaded articles and some baskets to sell, but that is about the extent of their industries. You cannot educate them, nor can you train them to trades." The man was a jeweler. He had been on the educational board in the large town in which he lived for thirty-five years. I said to him, "Has there ever been any attempt in your town to take young Indians into your public schools to try to find out what they are capable of in a contest for knowledge with the children of your town?" He said that he did not know of any young Indians ever in the public-school system; that the State had given them a public-school system of their own on their reservations, and paid the teachers; that the great difficulty was to keep up the attendance in these schools. I asked if there was any prejudice against Indians attending the public schools. He said he thought not, but that the State had been paying to keep up these Indian schools, and they were conceded to be failures. I said, "You have no right to judge of the possibilities of Indian education until you have given the young Indians the same chance to get an education that you give the white youth. Now you are a jeweler. You have had many apprentices in the years in which you have carried on business. Did you ever take a young Indian as an apprentice to see whether, if he had a really good chance, as he would have in your store, he might not learn to be a jeweler? Have the other business men of your town taken young Indians into

their shops and business, and attempted to teach them, as they do white youth?" He admitted that no such attempts had been made by any of the artisans or business men of his town, and that he himself had never once thought of doing such a thing. "Then," I said, "you have no right to condemn the young Indian as incapable. He is entitled to just the same opportunity to acquire an occupation that the young people of our own race have; and if he then fails, there may be some show of justice in sending him to the rear."

Greater thoroughness in teaching and more prolonged effort may be justly considered as necessary when the individual has had a bad start. Very little is to be conceded to generations of savage ancestry. Heredity of birth is not of most importance. Heredity of environment is the potent factor. Carefully raised and well civilized white men, through savage and worthless environment, easily become degraded, savage, and worthless. So too, savage born and rudely raised red men become civilized, enlightened, and useful, through well civilized and enlightened environments. It is but a step either way.

From long experience and wide observation I have come to have little patience with a science of ethnology that consigns any man or race of men to generations of slow development. The world is full of evidences to prove the contrary. To make an independent and industrious individual man, the individuality and personal responsibilities of the subject must be recognized in every part of his preparation. He must not, because of birth or for other reason, be tied to any set of individuals. Thank God for the American principle which recognizes the independence and individuality of every man, and does give to so many of our divers and vast population such individual opportunities; and for that great typical American and poet who so quaintly and truly stated it all when he said:

"The great American idee
Is to make a man a man and then to let him be."

R. H. PRATT

INDIAN SCHOOL,
CARLISLE, PA.

III

THE PLACE OF ART EDUCATION IN GENERAL EDUCATION[1]

One of the greatest gains made during the half century now closing is the clearer insight of men into the meaning and the implications of evolution. There was a time when the newly discovered facts of the past history of the earth and its creatures, seen dimly and without much relation to other facts, staggered all but the most courageous minds with the vastness and ominousness of the problems they involved; but, as years have gone by, men have come to see the same gigantic and enigmatic facts in clearer mental perspective and under brighter light. Now the philosophy of evolution, as Dr. John Fiske and others clearly proclaimed it years ago, and as Henry Drummond has lately so admirably reaffirmed it in his work on the *Ascent of man*, is the common possession of most thoughtful people.

This evolutionary history of the world of man is only the scientific, detailed tracing out of the means and ways by which there has been brought about the stupendous fact of man's place in the scale of creation, which keen philosophic speculation had long ago made him conscious of, even while unable to understand or account for it. The theologian of three centuries ago meditated in the older Hebrew phrase:

> When I consider the heavens, the work of thy fingers, the moon and the stars, which thou hast ordained; What is *man*, that thou art mindful of *him*?

But to-day in the light of evolutionary science, the thought takes a different accent:

> When I consider the heavens, the work of thy fingers, the moon and the stars, which thou hast ordained; What *is* man that thou *art* mindful of

[1] An address delivered before the Department of Art Education of the National Educational Association, at Denver, Colo., July 12, 1895.

him? . . *Thou madest him to have dominion over the works of thy hand; thou hast put all things under his feet!*

Whichever road we travel—the old path of ontological speculation, or the new path of scientific investigation—we come out upon the same intellectual hilltop, namely, the thought that man, as a physical being, is the consummate product of material creation, while, as a spiritual being, he is the appointed master of material creation and the beginner of a new world of spiritual growth and spiritual creation.

The essential, distinguishing fact about him is his more direct relationship through his personal feelings and desires to the Divine, that is, to the eternal spiritual reality of the universe, than exists in the world of matter around him, which can only passively reflect the Divine.

I shall assume that we agree to start out from this standpoint in considering the question before us to-day. For, in order to think to any real purpose about the place of art education in general education, we should first obtain a clear idea of the relation of education itself to human development, and then the place which the arts of the race—literature, music, painting, sculpture, and architecture—hold in the development and training of spiritual man.

The first proposition that I have to offer you is one upon whose acceptance or rejection the general character of the whole scheme of public education must logically depend. It is as follows:

PROPOSITION I—That the human soul is a self-acting spiritual entity, which is more completely a revelation of the divine spirit behind all which is, than is shown in the material world; and that this soul or spiritual entity, when properly developed, dominates man's physical powers, making them subservient to itself.

We hear much in these days about the human soul as having no demonstrable existence *per se*, but being merely the sum of the material forces of the universe, and as possessing only such powers as are induced in it by the play of these material forces upon the bodily organism. This standpoint is practically assumed by that portion of modern empirical psychology which

has been aptly described as "psychology without a soul." Ribot in his work on *German psychology of to-day* accepts this phrase ("psychology without a soul") as fairly describing, in its negative aspect, that new psychology which confines itself to studying forms and conditions of mental action without any regard to the question of what the soul is or even whether there be a soul, and which treats psychic forces as merely differentiations from the material forces studied in physics, chemistry, and animal physiology.

Of course it cannot be claimed that the mind or the soul is independent of the physical organism. We cannot conceive of the human mind as being able to annul the laws of external matter. What I wish to claim is simply that the mind, being an entity in itself, has a certain power of control over that very material mechanism (the brain) whose conformation and functions condition it; and that it has also a certain original power of combining with and taking advantage of the forces of the material world so as to modify their actions and transform their applications.

Nor is it intended to deny that the senses are the appointed gateway through which, and only through which, the things and the forces of the outside universe can come near to us to influence us, and give our minds material to work with. What I do wish to remind you of is the fact that the spiritual entity behind and above all the man's sense-organs, *that to which matter appeals through sense-impression*, is the thing of first and greatest importance.

You remember the famous aphorism of Leibniz: "There is nothing in the intellect which was not previously in the senses —except the intellect itself!"

As a matter of fact, the stoutest champions of the theory of soul as a combination of differentiated physical energies cannot keep their footing on their slippery ground. They cannot explain or indeed fully express their own theory without falling back upon assumptions which are inconsistent with that theory.

The fact is, the whole scheme of experimental psychology—

which aims to reduce mental phenomena to unmediated physical energies playing through matter, and so to dispense with self-activity in the intellectual life of man—is (as Professor Ladd has pointed out with such clearness and vigor) based wholly on an assumption of the self-active intellect itself, *i. e.*, on the purely mental hypothesis of the existence of atoms and molecules, through which the primal energy can transmit and manifest itself. And this hypothesis is a pure synthesis of the mind. So we have the paradox of human beings denying that the human mind has any real essential existence as a self-acting entity, and yet asserting that the ultimate basis of all so-called mental phenomena is traceable to physical forces acting in certain minute units of matter, whose very existence is, after all, merely a convenient conjecture of this dependent physical mind itself![2]

We must remember that this question as to whether the soul is a self-acting entity or merely a higher differentiation of molecular energies is more than just a curious problem for the biologist and the metaphysician.

It has a distinct bearing on the problem of child education. If mind development is taken to be merely a matter of automatic transformation of sense-activity into thought-activity, the general spirit and plan of education (which aims at mind-development) will naturally be quite different from its spirit and plan when it is conceived of as an appeal to a spiritual entity, a self-determining *ego*, with powers both of assimilative and creative self-activity, capable of being

[2] "When we have once separated matter from thought, when we have called matter what is perceived, in opposition to thought or what perceives, we must not eat our own words or swallow our own thoughts by saying that, for all we know, matter may think or mind may be touched and handled.

"From this point of view I call materialism no more than a grammatical blunder. It is the substitution of a nominative for an accusative, or of an active for a passive verb. At first we mean by matter what is perceived, not, indeed, by itself, but by its qualities; but in the end it is made to mean the very opposite, namely, what perceives, and is thus supposed to lay hold of and strangle itself. What causes the irritation of our senses is confounded with what receives these irritations; what is perceived with what perceives, what is conceived with what conceives, what is named with the namer. It is admitted on all sides that there never could be such a thing as an object, or as matter, except when it has been perceived by a subject or

developed to various degrees according to the individuality of that *ego*.

Let me not be misunderstood as underestimating the value of contemporary physiological psychology to education. Understood in its right relation to educational problems, it can be and is of great practical assistance in educational work. The actual effect of bodily conditions on mental activities is nowadays being better understood than ever before. Our practical appreciation of this understanding is shown in improved systems of ventilating, heating, and lighting schoolrooms, and in thoughtfully planned courses of physical culture. The actual importance of sense-experience, as basis and material for mental activity, is nowadays better understood than ever before. And our practical appreciation of this understanding is shown in the great movements for form-study, for manual training, and for the experimental study of natural science. The more we understand of the subtle interrelations between the physical and the mental, the more directly we can go to the point in classroom teaching without so much futile misdirection of effort as has often been inevitable in the past. But the danger involved in this new enthusiasm for physiological psychology, or the study of "consciousness content-wise," is the danger lest it be supposed to cover the whole educational problem when it really covers only the lesser half of the problem. Educators to-day are in danger of overlooking that larger factor "consciousness function-wise," in the child, which, though it cannot be measured or weighed or

a mind. And yet we are asked by materialists to believe that the perceiving subject, or the mind, is really the result of a long continued development of the object or of matter. This is a logical somersault which it seems almost impossible to perform, and yet it has been performed again and again in the history of philosophy." —F. Max Müller, *The Science of thought*.

"While mind and matter may both be called substances, they are different kinds of existences. We know them by different organs: the one by self-consciousness, the other by the senses. Again we know them as possessing altogether different properties; the one as perceiving, reasoning, feeling, willing; the other as extended and exercising energy. The properties of the one cannot be predicated of the other. Thinking and feeling have no place in that stone; nor have softness, hardness, or gravity in our souls."—Dr. James McCosh, in Preface to Ribot's *German psychology of to-day*.

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tabulated in any sort of psychological statistics, has more weight in the determination and direction of mental activity than all physical and material factors combined. Practical education should not be suffered to fall into the mistaken, exclusive extreme into which it seems to be drifting; where circumstance and environment, acting automatically on the brain, are reckoned as all-effective, and the elements of personal effort and personal responsibility on the pupil's part are hardly recognized. This extreme is, of course, easily comprehensible as a reaction from the old-time formal teaching. But either extreme is bad. And as a safeguard against the current tendency to suppose that sense-contact with the things of the natural world may be trusted to solve the whole problem of right spiritual development, I feel that a firm stand should be made for the recognition of the individual soul with its self-activities, responding to but not derived from the material forces of nature, as of the first and greatest importance in educational psychology and in practical educational work.

My second proposition is:

PROPOSITION II.—That man, by virtue of this self-acting soul, becomes, in his highest estate, not only a transformer of the material conditions which surround him, but also an actual creator of new spiritual values of an altruistic character; hence his arts.

I can take time merely to suggest in the briefest fashion how man is a transformer of the material conditions round about him, and how his activities are imbued with the altruistic character; how he, and he alone, in contrast to all other living creatures, sets to work with conscious and deliberate foresight to change those very material facts which, to a certain extent, experimentally condition his range and mode of inward life; and how his activities, crystallized into arts, have changed the face of the earth and the semblance of many of its creatures into something quite unlike their original estate, making both nature and her creations immensely more contributory to his own well-being.

Man's activities may be classified into two divisions, the useful arts and the fine arts.

The useful arts exercise his creative powers chiefly on but one plane of his existence and that the lowest, namely, the physical. While they mark a nation's upward growth to a certain limited extent, they do not of themselves embody all of our race experience, nor even the best of our race experience.

The fine arts (poetry, music, painting, sculpture, and architecture) are the forms in which the higher life of man embodies itself. It is to these fine arts that we always have to look, in order to learn in what way and to what degree a people have climbed up above the level of mere animals, clever enough to secure good things to eat, effective shelters from the weather, and convenient coverings for their bodies.

In a certain sense it may be said that there is a large part of the best of our race experience which never gets embodied in any tangible material form at all, but acts for the creation of new conditions rather than new things; refining and elevating the quality of personal character and daily life, but never shaping itself into any explicit forms of art creation. It is not quite true that these particular spiritual energies are unmet with in the fine arts—for, in indirect ways, the most commonplace toil helps make the work of art possible (we all remember our nursery stories of how the farmer and the miller help prepare the child's breakfast for him),—and, in a still higher sense, every noble inward life helps create a more healthy spiritual atmosphere for all other men to breathe.

But the fact remains that if we would direct our thought to the definite, tangible records of man's higher life, we must look for those records in the various forms of the fine arts.

Creative activity which brings forth the useful arts is service rendered in laying the foundation of material civilization. Creative activity which brings forth the fine arts is service rendered in building the superstructure of spiritual civilization. Man is so constituted, and human society is so constituted, that the higher powers and activities of the race naturally and necessarily ultimate in the fine arts as the very condition of ever-developing character.

Now if we accept the doctrine of evolution, man's soul or spiritual self is the latest and fullest revelation of the Divine cause of all that is; and this spiritual self coexists with the animal frame and the animal nature which constitute physical man,—the climax of physical creation. A constant struggle is going on between his animal nature, which is inherited from his animal ancestry, and which works for self, and his spiritual nature, which is altruistic and which is impelling him forward to work for others. Man's arts are at once the evidence and the result of this conflict.

This is the unanimous affirmation of science, history, and religion.

My next proposition is:

PROPOSITION III—The history of civilization is the record of man's progress in the creation of spiritual values through the subjection of his own animal nature and surrounding material nature to the service of his spiritual needs and ideals—hence the world of art. For the arts of man are not merely incidental to civilization. They are the supreme products of his creative spiritual activities, the condition and promise of higher civilization.

It cannot be too strongly emphasized that art is not a mere incidental phase of the life of man. Some people have an idea that it is so; that it simply happened in successive ages that people spent their playtime in building with blocks on a large scale, making "stone dolls," and composing tunes, rhymes, and fantastic tales—occupations whose remains are well enough to interest the idler of to-day, but which have no solid significance for practical people.

This notion of art is as far as possible from the truth of the matter. The fact is that in every age man's creative energies have embodied themselves in art forms in order to satisfy the irresistible divine instinct of creation within him, and make a way in which to share with his fellows his inward personal experiences.

The fact that we ourselves stand to-day where we do stand in the progressive march of civilization is due in no small measure to the earlier fact that generations of men before us,

who lived and loved and suffered and hoped, and who wrought their own wonderment and desires, their aspirations and their hopes into art forms, have bequeathed to us their arts as their richest and most beneficent legacy. We hold this legacy now in the form of the world's great epic and lyric poems, and in its fiction and dramas, instinct with human passion and human aspiration, peopled with personalities of man's own imaginative creation, even more real in their influence to-day than the shadowy names of history. We hold it in the form of the great treatises on philosophy, government, and the sciences, the very condensation and crystallization, as it were, of the human intellect. We hold it in the world's Bibles, the legacy of the religious thought of the race. We hold the legacy again in the form of the worlds' great music—the symphonies that still make our world palpitate with exquisite harmonies once conceived by human genius—the oratorios and operas, and the songs that, like unquenchable torches, kindle the souls of each successive generation of human kind with fires of joyousness, of patriotic ardor, of religious ecstasy.

And we hold the legacy yet again in the form of monuments and temples, cathedrals and majestic colossi, eloquent of the questionings and longings of souls facing the great mysteries of life and death. We hold it in the form of treasured remains of sculptures, eloquent of old-time insight into the divineness of beauty and old-time delight in such insight. We hold it in the form of the world's great paintings, eloquent of all man's widest range of interests and sympathies, of his love for the good and the right, of the gradually clearing vision which has enabled him to see the Divine in nature and the still higher manifestations of the Divine in humanity, and to make the vision manifest to all mankind.

On another occasion I shall discuss the bearings of art education upon the labor problems of the day, and through labor upon all the interests of social well-being. On this occasion I can only remind you of the immense significance of art from the economic point of view.

Now, standing as we do to-day in the possession of this art

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legacy from the men of the past, can we rationally minimize it, and, as many of the educational leaders demand, consider the child merely as a particularly high differentiation of physical energies, the passive subject of nature, molded and played upon at nature's mercy? I tell you, Nay. We must see and own and practically act upon a truer conception of the mind of man, and upon such a larger vision of the place of man in creation's scale as was so strongly brought out by Dr. John Fiske at Harvard two weeks ago, in his Phi Beta Kappa address. Dr. Fiske then gave utterance to words that are to be forever memorable in the great discussion upon which thinking men are now entering with reference to man and his destiny in the light of evolution, and he has kindly sent me his exact words for use on this occasion. In speaking of psychical man and contrasting him with all that preceded him, Dr. Fiske said:

> The physical variations by which man is distinguished from apes are not great. His physical relationship with the ape is closer than that between cat and dog, which belong to different families of the same order; it is like that between cat and leopard or between dog and fox, different genera in the same family. But the moment we consider the minds of man and ape, the gap between the two is immeasurable. Mr. Mivart has truly said that, with regard to their total value in nature, the difference between man and ape transcends the difference between ape and blade of grass. I should be disposed to go further and say that while for zoölogical man you cannot erect a distinct family from that of the chimpanzee and orang, on the other hand, for psychological man you must erect a distinct kingdom; nay, *you must even dichotomize the universe, putting man on one side and all things else on the other.*

It is this stupendous sense of the soul's reality—that is, its individuality and its self-activity—that we need to emphasize in these days of talk about the soul as merely a derivation from sense-activities.

Let me ask all those who believe there is nothing in the mind but the product of the senses, Whence came these arts of man? Can you assume for their existence anything less than the existence in the mind of man of a creative power superior to the physical forces that surround him; a power

which appropriates through the action of the senses these physical forces and transforms them for its own spiritual ends?

I desire to leave this point with emphasis on the fact that these arts of man are not mere incidents in his development; they are the sum of his existence, that "toward which the whole creation moves."

My next proposition is:

PROPOSITION IV—That every child is born heir to two world environments (the material world of nature and the spiritual world of man), and also the possessor of aptitudes for ever expanding creative activities of his own.

We have seen that man is surrounded by two great world environments. These two world environments act upon the child, each in its own way. The material world of nature, the world of cloud and rock, of multitudinous plant life and swarming animal life, makes constant appeal to the new human being, through his physical sensibilities and physical interests, as one who is the crowning product of its own marvelous cycles of evolutionary energy. On the other hand, the spiritual world of man, the world of the arts, makes constant appeal to the new human being, through his spiritual susceptibilities and spiritual interests, as one who is capable of all that the race is capable of, and, as a new being, has endless future possibilities of personal activity. The upward growth of this new human being we find dependent upon the relation or balance between his responses to the influences of these two world environments, and it is here that we, as educators, should take careful note of how these two environments affect the child. His animal nature, obedient to the laws of natural evolution in the physical world, is absorptive, selfish. It grasps. It appropriates for the good of self. This is nature's provision for the perpetuation of the race. His spiritual nature, on the other hand, obedient to the laws of spiritual life, is creative, altruistic. It gives. It makes for the good of others. This is the divine provision for the development of humanity. In so far, and in so far alone, as this spiritual response to, and utilization of, the influences of his spiritual environment predominate

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over his submission to the influences of his material environment, he grows toward that high human destiny which we can but faintly begin to forecast.

If it were true that children were only little animals, subject to nature's laws and possessing minds that work merely automatically under the outside stimuli of natural phenomena, it would be well enough to do as many modern educators advocate—simply surround the child with pleasing natural objects and trust their sensuous attractiveness will insure attention and observation, and that these will somehow of themselves evolve desire for what is truly best, and secure energetic action along right lines, toward high ends.

The unfortunate fact is, however, that, unless we make a strong appeal to children through the spiritual side of their nature, they are liable to respond only in terms of the animal. As most practical teachers know, we are likely to be brought up standing by the child's frankly materialistic measures of the universe. Those of you who have read the recent autobiography of Frances Power Cobbe will recall her experience when, returning to her country home for a visit, after several years of absence, she met a grown-up young man, who had been a pupil in the little village school organized and enthusiastically taught by herself.

"Well, Andrew," said Miss Cobbe, "how much do you remember of the lessons you learned at school?"

"Sure, miss," said Andrew, "I've forgot them entirely."

"Oh, but certainly you must remember something of them. Don't you remember about the earth and the sun and Mars and the other planets?"

Andrew scratched his head and light dawned upon his countenance.

"Yes, miss," he declared, "I do remember now. You laid them all out on the schoolroom table, and Mars was a red gooseberry and I ate him."

It evidently will not do to trust too far or too implicitly to the "automatic" transformation of sense-impressions into elevated thought.

Jacobi has truly said—"Nature conceals God: Man reveals God!"

Now is there any provision in the universe for helping to insure the predominance of man's spiritual development and his consequent progressive mastership of the material world?

There is: and this leads to the next proposition, one of the most significant of all the great significant truths of evolution:

PROPOSITION V—The period of infancy and youth, when the mind is especially susceptible to the influences of environments, and when the active powers are most easily directed, is a special provision for the unceasing development of man's spiritual qualities and creative activities.

Dr. John Fiske was the first to point out clearly to contemporary thought the important fact that physical evolution had come to an end in the production of physical man; and that further play of the evolutionary process must be sought in psychical man. He also pointed out how this psychical development was conditioned upon psychical or spiritual man making his physical being and his physical environment subject to himself. Dr. Fiske has also supplemented these important contributions to evolutionary philosophy by another of no less importance—one which cannot be ignored in any attempt to place education upon a truly philosophical basis. I refer to his statement that the long period of dependent infancy and youth in the human child, as contrasted with the prenatal provisions for self-existence in the lower animals, is evidence of a distinct plan for the increasing development of the psychic life of the human race, through a special provision in the life of every individual of a plastic condition of mind, whereby the accumulations of ever expanding human experience could be handed over from generation to generation through ever expanding faculties for self-activity in receiving, and then for ever expanding powers of self-activity in creating for the benefit of human life.

I cannot stop to discuss the immense significance of this evolutionary view of the psychic development of the race in its bearing upon education. If Nature's provisions in this respect mean anything, I do not think it will be ques-

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tioned but that they are intended for the ever increasing development of the psychical or spiritual man rather than of the physical or animal man.

And this leads to my final proposition:

PROPOSITION VI—Education should be the fullest possible utilization of the plastic period of infancy and youth, not only for cultivating a knowledge of the child's two world environments for his own spiritual enjoyment, but also and emphatically for training to skill in the creative activities along art lines, as the highest contribution of the individual to social well being.

The best education means simply the best utilization of this plastic period of the child's life for the development and training of that in him which most deserves to be developed and trained.

I say "that which most deserves to be developed and trained," assuming that not everything in the child's inherited make-up is of the same value. I take it to be a part of the responsibility laid upon mature men to weigh the various elements of human nature as fairly as they can, and learn to put educational emphasis on the more worthy of those elements. In our lesser task of guiding the progressive development of plant and animal life, we have for a long time made some such selection. Man's effort has been, not simply to help the earth bring forth more flowers and fruit of precisely the same sorts as would grow without help, but to put his intellect and his will in co-operation with the powers outside him, so as to transform existing conditions of growth, to the end that still more beautiful flowers and even more delicious fruits may be brought into existence. Look at our greenhouses, our orchards, and our market gardens for the result. When the task set us is to help work out the Divine purpose in the higher development, not of vegetable or brute beasts, but of new human beings, there is not less but more need that we should consider deeply the animal nature of the child on the one hand, and his spiritual nature on the other, and how the former can best be utilized in the full development of the latter.

The supreme purpose of education, so far as that education lies within our control, should be the development of the

child's capacity for unselfish creative activity and for spiritual enjoyment. The development of his other capacities should be treated with regard to the manner and degree of contributing toward this supreme end.

I intentionally use the term creation rather than expression, when referring to the supreme form of human activity, because I believe we ought to keep in mind the thought that the highest activity goes beyond mere "expression" (*i. e.*, the mere statement of what is), and becomes "creation," that is to say, productive action: action productive of new things or new conditions. This is a point that I wish particularly to emphasize, the distinction between expression and creation.[3]

This idea of education as training for creative activity includes all that was best in our earlier notions of the purpose of education. It includes the acquirement of stores of knowledge; for, of course, it is only upon the basis of a knowledge of what *is* that man can proceed to make things or conditions better. It also includes the development of individual power, because, of course, the man who can command himself is the only one who can effectively command matter or force. But the mere "acquirement of knowledge" may be as worthless as the accumulation of gold pieces in a miser's strong box, and the mere "development of power" may be as worthless as the

[3] This is not a mere verbal distinction. Man's most valuable and lasting work in any direction is work not merely expressing or stating facts that he has become aware of, but actually creating forth new facts. The dramas of Shakspere are not simply transcripts of things that the author knew to have actually happened to particular people. They are a new-created world wherein human character and human life show themselves even more clearly and more truly than most of mankind ever see with their own unaided eyes in the thick of common happenings. The symphonies of Beethoven are not simply expressions of what the composer had heard from winds and birds and running water. They are the positive creations of a self-active soul grasping the laws of harmony that are so faintly hinted at in nature, and embodying forth ideals of tone and rhythm that never had taken form without the composer's genius as a cause. The Parthenon with its sculptures was not simply a marble statement of the laws of gravity and of the religious and political opinions of the Athenian state—a material expression of existing facts. It was the bringing forth into visible and glorious existence of an entirely new creation: something that had not existed in the marble quarry but only in the constructive artistic imagination of man—imagination so strong, so clear, so high in its reach that it could and did command matter to its obedient service.

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development of power in a finished engine that stands unconnected with any sort of working machinery. The new ideal of education as training for creative activity includes both the effort after knowledge and the effort after power, and adds to these a purpose. That purpose is the active betterment of the world and the progressive elevation of human living.

And this view of education necessitates direct training, not only for creative thought, but also for skill in creating forth the best embodiments of such thought. It implies, not simply keeping the child's senses tickled with a succession of novel and pleasant impressions, which he may express or record in any fashion that comes easiest, but also in giving him such opportunity and such guidance in creative activities that he may gradually attain to self-command in these activities; that he may learn to respect positive standards of technical workmanship, and also learn to hold himself sturdily up toward them in his own endeavors.

Now I do not wish to be understood here as overlooking or as crushing out the element of the child's instinctive interest. I believe we ought to study very thoughtfully and very sympathetically the natural, instinctive interests and desires of the child, in planning and conducting educational work. But I believe that we should study these interests and desires, not just for the sake of following their indications of "the line of least resistance," but also and much more for the sake of *utilizing them as means whereby to lead the child out of his present animal self up to a still higher and better human self.* As grown-up men and women ourselves, we simply must believe that our measures of life are, on the whole, juster and truer than the child's own measure of life; else life itself is a hopeless anti-climax, the dreariest of illusions. The child would naturally prefer to possess a juicy apple to-day rather than to possess

"The Lord Christ's heart and Shakspere's brain"

next week; but that is no proof that good things to eat are truly more worth while than wisdom and righteousness. No.

What we have to do is neither to impose our own wills arbitrarily and absolutely upon the child's will, nor yet to fold our arms and indolently let him have his head in any direction and to any extent he likes. Ours should be the more difficult but much more honorable task of recognizing his feelings and impulses with ready sympathy; of bringing to bear upon those feelings and those impulses such spiritual influences as will combine with the influences of his natural environment; of developing right powers and habits, and encouraging right activities, and of giving him all the direct positive practice and training that we can give in the typical creative activities, to the end that he may have, not only desire to create, but also power to create forth in terms of art; that, besides having good intentions, he may actually do good work.

The desirability of training a child's powers of appreciating and enjoying what is noble and beautiful in both the world of nature and the world of art, which embodies so much of men's best thought and experience, hardly needs argument. Whether regarded by itself, as providing the child with an elevating mode of occupying leisure hours, or regarded as a step toward positive creative activity on his own part, such training, if wisely conducted by tactful guidance rather than by prescription and rule, may and should be a fruitful means of rounding out character in a wholesome, healthy fashion, and providing beforehand resources of true refreshment and lofty inspiration. Such resources of appreciative power are needed both by the artist and by his public; by the man of leisure and by the humblest workman. Indeed the balance of need lies with the one whose life is to be almost full of commonplace toil, if the improving industrial conditions which give him increasing hours of leisure are to actually make his leisure spiritually profitable to him.

We have hitherto spoken of art in its largest inclusive meaning, comprising all literature, music, painting, sculpture, and architecture. What is true of art, as a whole, in its bearings upon the life of the race and the education of the individual, is true of the particular lines of art which are usually referred

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to when we speak of art in education. Art in this sense is understood as applying to modeling, drawing, and coloring with their special functions in decoration, illustration, and sculpture, painting, machinery, and building construction and architecture.

Now there are two great obstacles in the way of the establishing of true art education in our public schools:

First. The mistaken and belittling notions about art and art education, which prevail to so great an extent among professed leaders of educational work, as well as on the part of the public.

Second. The unfamiliarity of the rank and file of teachers with the subject-matter and methods of true art instruction.

Now as to the first obstacle, many educators, when they speak or art, mean merely graphic expression, mere diagraming of imitating as a means of stating information. When they speak of art instruction they mean merely encouraging children to make maps, diagrams, and sketches, or models in connection with their lessons in arithmetic, geography, physics, and natural history. These apostles of "free" art practically take the ground that the average child can drop into art, as Mr. Wegg dropped into poetry, "in a friendly sort of way," and that, if he is just given clay, a pencil or brush and a piece of paper and urged to draw or model whatever he happens to see, just as he happens to see it, the result is *art*. This is just like giving the untrained and illiterate child paper and pen, telling him to write whatever he thinks, about whatever he pleases, in whatever way occurs to him, and calling the result literature. Now everybody would recognize the absurdity and futility of this latter procedure. We all know that the child cannot by himself evolve good literary taste and good literary style out of his own crude, desultory thoughts, plus a sheet of paper. There is no such short cut to literature. He must indeed write and write and keep on writing, but above all he must read and be taught what to read; his mind must be fed from the fruitful store of good literature which already exists, the legacy of accumulated ages of human culture.

Now it cannot possibly be our best plan to-day to ignore all the progress of the past, and make each child laboriously work out all over again the whole history of civilization, Dark Ages included, when he ought to be let into his birthright as "heir of all the ages." A broader and clearer appreciation on the part of educational leaders as to what art itself means as a factor in developing the creative power of the child, and what it stands for in social life to-day, is the first requisite for the success of art education as a part of public education. As evidence of how this great subject is ignored, we have only to refer to the reports of the Committee of Ten and the Committee of Fifteen; and further, I am not aware of any scheme of correlation of studies in which the subject is, in any way, adequately recognized.

But I believe a change is coming. Sooner or later it will be seen and practically recognized that what man has done in his arts is to a young mind in the formative stage what fertile soil is to a young plant. And when that time comes, men will no longer try either to cultivate rosebushes on a strictly primeval diet of granite, gravel, and rain, or to cultivate human souls on a strictly primeval diet of nature-study and untrammeled frolic.[8]

They will accept for the children under their care the advantages that lie in being heir of preceding ages, and use these advantages as a means whereby the new life may grow up to still higher forms of personal development and productive activity.

The second obstacle to be surmounted (the imperfect equip-

[8] I heartily believe in the introduction of various lines of nature-study into the public schools. In city schools particularly such studies are an indispensable help in bridging the chasm between the child and his natural environment, and giving him at least a suggestive glimpse into the marvels and beauties of the natural world. What I do object to is the extreme ground taken by some educators (an extreme precisely opposite to that of the old-fashioned word-for-word text-book memorizing) wherein it is fancied that the study of nature is educationally all-sufficient; that language and number study can be sufficiently and successfully developed as mere incidentals to nature-study, and that drawing, used as the handmaid of the natural sciences, can constitute art instruction. Against this misconception of what art means, and what art study ought to be in a course of education, I believe a strong protest should be made.

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ment of public-school teachers for carrying on art instruction in the classrooms) will be done away as far as and as fast as the leaders come to appreciate the true nature and importance of art as a fundamental feature of educational work. For the grade teachers of our American public schools are essentially capable and loyal. They are able and ready to learn whatever it is necessary for the good of the schools that they should learn. But they need definite assistance and guidance. Suitably planned courses of study will do much to help; courses arranged not hastily or perfunctorily by people with narrow views of the subject and with slight acquaintance with the experience of others in similar work, but thoughtfully and intelligently by persons who can comprehend both the physical nature and the spiritual nature of the child. Only those who are engaged in this work know how narrow are the limitations that surround them. The best that exists to-day is but a stepping stone to what should be done and what can be done as soon as a better understanding of what art means exists among the teachers. Rightly planned courses of study, reinforced by suitable working materials, and art examples, good and abundant, to which the children themselves may have ready access; the whole interpreted by a wise and sympathetic supervisor, who knows his subject, and who understands child-nature in hearty, affectionate fashion—I tell you, my friends, we have as yet seen only the beginning of what a power art education may and ought to be in the inward uplifting to useful and noble work of the successive generations of children who pass through the public schools of our land.

To summarize in a few words the points we have been considering, let us remind ourselves:

That evolutionary science, ontological philosophy, and empirical psychology, in their truest interpretations, practically agree in declaring that man is the highest of all finite existences, from which proceed self-acting spiritual powers.

That the arts of man are the embodiment of these spiritual self-activities of the race exercised along creative lines; and that, being thus the highest activities of the highest of all

finite existences, they should be constantly utilized in education, if education has for its distinct aim the development of what is best in the child both for himself and for the social life of which he is to form a part.

And now let me say in conclusion that, if I rightly apprehend current educational discussion, many of the schemes of correlation or of concentration, that are being advocated, are based mainly on the consideration of the physical environment of the child, the forces of which play upon the brain through the action of the senses, and hence are exterior to the child. The result of such schemes is to make the child largely the product of his physical environment. As opposed to these more or less materialistic views of education, I suggest that we take as our center of thought the child himself, with a full comprehension of his creative spiritual nature, and then measure the relative values of educational subjects, according as they contribute to the development of his highest possibilities as a creative spiritual being. By so doing, we shall see that the creative activities of the child form the real educational objective, and that the arts of man, as ministering to these activities, should not be relegated to any incidental place in the arrangement of studies, but should be practically recognized as the most inclusive, the most vital means we have for centering our educational effort aright; centering it with all its nourishment and all its inspiration upon the soul of the child—upon the child as the heir and the potential master of the world.

JOHN S. CLARK

BOSTON, MASS.

IV

WHAT IS PHYSIOGRAPHY?

It is not long since that a critic, in *Modern Language Notes*, declared with rather bitter emphasis that a new name was apt to strike terror in the hearts of *οἱ πολλοί*. Perhaps such a sweeping statement may be open to the charge of exaggeration, but it certainly contains more than a grain of truth. A new name with a definite meaning, especially if it be formed on correct principles, is apt to be coldly received, and quite as apt to be supplanted by some senseless combination of stems that does not even possess the merit of a meaning.[1]

Within the past few years a new word has been gradually creeping into use, namely, the term physiography. It was first employed by the late Professor Huxley some twenty years ago to designate more particularly certain features concerning the regimen of the river Thames.[2] As Professor Huxley used it, the word was expressive and admirably selected: doubtless, too, his employment of it was the forerunner to its recent adoption as a permanent expression in the nomenclature of geographic science. But the term has now a much broader and more exact application than it had in the time of its adoption. It is more significant likewise—not because it was used either loosely or inaccurately by Professor Huxley, but because in the interval a new science has been developed out of what were unsorted and uninterpreted fragments. So appropriate is the word, and, moreover, so expressive of the

[1] Thus *piano-forte*, gradually shortened to *piano*, has supplanted *harpsichord*, or *clavichord*; *dynamo*, absolutely meaningless as at present found, is popularly used in place of *generator*, a word that anyone might comprehend; while newspaper English is responsible for *electrocution*, a particularly vile composition of stems, used to designate the execution of the death sentence by means of shock.

[2] This name itself is interesting from the physiographic side; it is *tam eisis*, the broad water. In early history the river extended from St. Paul's to the Sydenham Hills, on the Surrey side.

meaning sought to be conveyed, the only wonder is that it should have so long escaped geographers and geologists. The author of at least one text-book has scented something alarming about the word, however. After surveying in a very gingerly manner what seems to him a pitfall, Professor Houston takes precipitate flight, leaving a rather innocent minority report to the Committee of Ten to cover a hot trail. Just why Professor Houston should take alarm, however, is not plain. Had he investigated the application of the word in its more modern sense, he would have discovered that not a few paragraphs in his manual were open to the charge of being physiographic rather than geographic.[3]

Now, inasmuch as most text-books on physical geography contain material that encroaches more or less on the bounds of physiographic science, it is difficult in a few words to express the distinction between the two subjects; it is still more difficult to draw the line between the latter science and geology. Properly, physical geography includes only the description and distribution of landscape and surface features. Physiography on the other hand treats of the science of earth-sculpture, *viewed in the light of systematic processes.* The participial clause is italicized because it is this after-thought that marks the distinction between Professor Huxley's use of the word and that of its renaissance. Perhaps it would not be far out of the way to say that physiography shows the evolution of surface features; at all events, it will be easier to illustrate this idea by the use of concrete examples than to attempt an abstract definition.

The surface of the earth is modified mainly by two forces. Secular contraction, arising from loss of heat, causes the outer layers of rock to wrinkle and cockle in fitting themselves about a more rapidly shrinking interior; atmospheric and telluric waters are constantly at work removing inequalities of level. In other words, while one force is making the earth's surface uneven, the other is smoothing it off. The operations of these forces, therefore, are the problems with which physi-

[3] Cui proposita sit conservatio sui necesse est huic partes quoque sui carasesse.

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ography has to deal. Were these operations constant and uniform, the systematic investigation of them would be comparatively easy and simple. But inasmuch as the opposite is the case, the geographer's task becomes at once complicated and difficult.

Of the various physiographic agents, rivers are perhaps the ones whose work is most apparent, and, in many respects, the most striking. In physical geography, however, the description of the river stops usually with an allusion to some extraordinary feature, as, for instance, the falls of Niagara, the delta and ox-bows of the Mississippi, the cascades of the Columbia, or the estuary of the Severn. The stream is considered as a fixed and unchanging feature of the present rather than an ever changing panorama of action belonging to the past and the future as well as to the present. In detail, its torrential sediment-transporting and sediment-depositing parts are described, each minutely or generally, as the case may require.

But physiographic processes demand a more philosophical and a more historical consideration than the mere questions of morphology suggest. To the close student of nature, there is that about the regimen of a river that suggests intelligence; the stream is a living thing rather than a mechanical agent. Let us suppose that in some part of the earth a plain has been recently formed; perhaps by the elevation of a previously submerged coastal deposit, perhaps by the drainage of a lake and the elevation of its bed. In either case the natural drainage of the plain presents many difficulties. The water gathers in pools, and a considerable time may elapse before the overflow of these develops into anything like a connected channel. One channel after another may be chosen and rejected. It may not be wisely chosen; or, if wisely chosen, it may become self-obstructed to the extent that to make a new stream-bed is easier than to clear out the one clogged. This is the young or adolescent period of the stream's existence. In time, however, the river reaches a maturity. During this period it extends its headwater ravines and gulches far backward, capturing the contents of less vigorous streams, and, lower down, building a

wide flood-plain. If the mouth of the stream does not face the tide, the flood-plain may extend to a considerable distance seaward, forming a delta and, quite likely, a wide strip of made land along the coast. The old age of the stream begins when, after having extended its headwaters backward, cutting out and clearing away everything within reach, it attacks its own flood-plain and clears that away also. Thereafter the river is merely a body of flowing water, practically fixed and unchanging. Possibly, at some time or other, the elevation of its bed may temporarily rejuvenate it, but in the main its life history and development are at an end.

It should be remarked, however, that not every stream exhibits a typical development of these three stages, for in many cases changes in the base level, the uncovering of strata whose dip differs from that to which the stream has adjusted itself, changes in climate, accident—all these may interfere with the normal development and life of a stream. But as a rule, at least two of the stages may be found more or less apparent. Thus, the Red River of the North is a decided example of infancy. It is hardly sure of its channel even now, and in many places it has not passed the pooling stage. The Sacramento, and in many respects the Ohio, are fine examples of rivers enjoying a vigorous maturity—as indeed is the case of most of the rivers of the great central plain. The upper part of Allegheny River especially is noticeable for the vigor with which it is extending its headwaters backward. The Susquehanna of Pennsylvania is equally remarkable, and the various wind gaps—every one an old-time water gap—are testimonials to its ability to capture and appropriate the waters of less vigorous streams.

The St. Lawrence is a fair example of a stream in its old age. About everything that its flood could remove has long since been carried away. This is true also of many other rivers of the eastern part of Canada. Most Canadian rivers, it may be remarked, were greatly modified during the Glacial epoch.

Let us now consider the results that may obtain when an

additional factor, a progressive change of level, is introduced into the problem. We will suppose that a surface fairly diversified with mountains, and generously supplied with rainfall, is gradually losing its altitude by subsidence—sinking little by little below sea level. Through the action of atmospheric moisture the relief features have lost all their boldness of contour, and have been worn and rounded into more graceful forms. The products of erosion have not only filled the valleys, but they have also been deposited offshore, in time building a wide coastal plain.

But the gradual subsidence results in even a more radical change. The coastal plain disappears; the piedmont lands are buried; the valleys between the ranges are flooded; and the ranges themselves become either skeleton peninsulas, or else are cut off from the mainland by the encroaching sea. The rivers are robbed of their importance as well as their watersheds. The lower part—the trunk of each—is drowned, along with the coastal plain; instead of a great system of tributaries, all gathering into a single drainage-channel, there results a number of short mountain torrents. So the process goes on until the whole river-system, its dismembered headwater streams excepted, is covered by the littoral waters of the ocean.

But subsidence and elevation are concomitants and usually alternate one with the other at irregular intervals. Sooner or later there occurs a reversal of movement, and, with intermittent periods of rest, a gradual uplift takes place. The old coastal plain, considerably increased in thickness by marine and alluvial deposits, little by little emerges from the sea. Nearly or quite all the old, buried stream-channels are recovered by their former occupants, and most likely, owing to slight structural changes, new or consequent streams will be formed here and there. Sooner or later some of these will be captured and absorbed by the older revived streams, but in many instances the younger stream, being the more vigorous, will seize the older and permanently acquire it. But in any case the dissevered members gradually effect the resurrection

of the trunk-channel, and the temporarily isolated fragments finally develop into a river system.

The streams have then reached a new stage of maturity and begin on a new life's work, namely, the gradual and systematic removal of the fresh stratum of sediments which were deposited on the coastal plain while it was submerged. The process may be long continued, and perhaps it may never be fully completed; but it is at least systematically carried on. The tributary stream-channels are extended backward and laterally, pushing into the territory of one another until the plain is dissected into isolated mesas, and finally even these are removed.

The physiographic history of a lake, though perhaps not so complex as that of a river, is equally important in its bearings upon general geography. Let us follow the history of one of a common type. A river finding its channel obstructed, either by its own sediments or by secular change in the level of its bed, breaks through its banks and pours its flood into a basin-shaped depression, thereby forming a lake. Either the basin fills until the supply of water just balances the loss by evaporation, or else the level of the water rises until it overflows at the lowest part of the rim; let us take the latter case. From the moment the lake comes into existence powerful agents at once systematically begin their work of destruction. In the first place the inflowing streams are constantly bringing down considerable amounts of sediment in their floods, and this, the moment their floods reach the still water of the lake, is quickly deposited along the margin, forming an array of mud-flats, spits, bars, hooks, and deltas, as the case may be. The outflowing stream is equally vigorous in the destruction of the lake. It cuts the notch in the rim deeper and deeper, thereby lowering the level of the water. Vegetation, likewise, contributes largely to the destruction of the lake. Algæ, species of sphagnum, and various other bog plants margin the shore and extend outwardly from it. Not only do their dead and decaying remains accumulate along the shallower portions of the shore, but they are not less effective in gathering and

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holding the æolian detritus that is constantly blown upon their surface. So between the deposition of sediment at the head of the lake, the cutting away of the rim at the lower, and the marginate accumulations of vegetable remains along the shore, the lake sooner or later disappears. It is not very many years ago that the idea of a buried lake-basin was regarded as a novel feature by geologists; in later years, since it has become the custom to approach such problems from the physiographic side, the discovery of obliterated basins no longer creates surprise.

In a like manner, one might follow the life history of a coast lagoon, from the time that a wave-formed bar begins to block up a cove or an estuary. The various stages of sound, lagoon, salt marsh, and pocoson are too familiar to require description here. So, too, one may follow the gradual formation of mountain folds from the time that abnormal accumulations of sediments are piled along continental shores until the subsequently formed plications are degraded almost to base level by the various weathering forces.

The foregoing examples illustrate in a general way only the mutual inter-development of geology and physical geography. It has been objected by several prominent educators that this study belongs to geology and not geography; to the college and not the elementary school. And yet one of the most vigorous objectors advises out-of-door observations in almost the same breath in which he objects to physiography in the elementary schools. Such an objection is merely a confession of ignorance. The six-year-old child who is led to observe that the rills flowing in wheel-ruts widen them and carry the washings to the nearest mud-puddle is studying a problem in physiography just as certainly as did Director Powell and his staff of geologists when they wrestled with the problems of the arid region. The difference is one of degree only. One might as well argue that geography should not be taught in primary schools, because certain departments of the subject, as economic geography, properly belong to the university. To say that physiography should not be studied in the ele-

mentary schools is to insist that pupils shall not become acquainted with the fruits of modern geographic discovery. One might just as reasonably claim that pupils should not be permitted to study physiology because it is a science belonging to the medical school.[4]

That certain aspects of physiography belong to geology, rather than among the topics conventionally included in geography, is certainly true.[5] Some of the problems involved are altogether too abstruse for any except advanced post-graduate work; but the fundamental principles are not so difficult that they cannot be understood by ordinarily bright pupils of the elementary schools. The only question is, how and in what manner shall the subject be presented. The Committee of Ten assumes that the study belongs upon a higher plane than that of physical geography; and, looking at the subject from a purely scientific side, the idea of the Committee is a correct one. As a science, physiography deals very largely with the abstract, and its place is therefore among collegiate rather than secondary or elementary studies.

But if it was the intention that no aspect of the science should be presented in the elementary and secondary schools, the plan of the Committee is certainly open to strong criticism. While it should have a place, and an important place too, in the curriculum of college studies, it should have an equally important place in the lower schools. It is not necessary that text-books on the subject should be placed in the hands of the pupil; indeed, it is not advisable that text-books[6] on the subject be used in the elementary schools at all. The correlation of physiography and the ordinary descriptive geography

[4] Crass, obstinate ignorance is generally at the bottom of such a line of argument. It is not many years since the writer heard a physician of local celebrity inveigh against the modern science of bacteriology as one of the humbugs of medical science. A few weeks afterward this practitioner went directly from a puerperal fever patient to officiate at the operating table. It is not necessary to specify the result.

[5] For example, the problem of the deformation of the geoid, as elaborated by Mr. Woodward and the late William Ferrel.

[6] The name already appears as a title of several text-books, but a cursory examination is sufficient to show that the volumes themselves are innocent of any connection with the modern idea of the subject.

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that is now taught in schools is very much like the correlation of algebra and arithmetic. Certain algebraic processes intrude themselves in a large number of the problems found in arithmetic. The unknown quantity is apt to present itself when least expected, and the teacher is driven to many expedients in a hopeless attempt to disguise it. The wise teacher, however, is not afraid to use an x or an $x + y$ when the occasion demands, even in an arithmetic class. In other words, while algebra, being an abstract science, comes theoretically *after* arithmetic, many algebraic processes come *with* arithmetic and should therefore be taught as a part of that subject.

Now the relation of physiography to school geography is very much like that of algebra to arithmetic. Certain physiographic processes obtrude themselves at almost every step in ordinary geographic studies and in political economy. They must therefore become a part of the pupil's stock of knowledge. The text-book in geography that is to become useful in the future may not contain a well-arranged course in physiography, but must be based on physiographic principles, and the subject must be developed on physiographic lines. No revolution in courses of study is necessary to bring about a revolution of results in geography teaching. The only necessary requirement is that the teacher must educate himself, by reading and field-work, in the higher aspects of geographic science. The rest will come of itself. Moreover, even in the elementary schools, field-work or out-of-door lessons must become a regular part of the course. These are just as essential to the proper study of geography as laboratory work to chemistry and physics. Not all the field-work needs be actual out-of-door work: there are many instances in which photographs and the now well-known half-tone illustrations may be advantageously used. In the more advanced grades the study of physiographic scenery will gradually develop into the art of interpreting physiographic processes from maps. Except to the few teachers who have been trained in German schools, or in the more recent courses of certain colleges, this art is unknown in American schools. There is nothing especially

abstruse or difficult about it, however, and to a certain extent it may be acquired even by younger pupils.[7] In any case, the study of good pictures and maps is a most excellent and instructive supplement to actual field-work. Any feature of any science is best appreciated and comprehended when studied by comparison.

For several years a gradually strengthening current of opinion has been settling toward a very definite quarter of the educational horizon. It is not unlikely that, in a modified form, the German methods of instruction will ultimately prevail in this country. In the first place physical geography, in its physiographic aspects, will be the structure upon which geography teaching is based. Observational lessons and field-work will have an important place, but they will be based upon the great principle that geographical processes are not to be studied merely as events of the past; on the contrary, they must be regarded as progressive and continuous operations of the present and the future as well. Doubtless the old-time theological ideas of cosmology are more or less responsible for many of the notions about "creation"; but the student of cosmography will readily observe that creation is quite as much a thing of to-day and to-morrow as it was of the epoch when the earth was "without form and void."

The text-books now most needed for both primary and grammar-school use are books in which the subject is developed from the physiographic side. It is unfortunate, however, that, at the present time, such a series would be attended with not a little risk. The normal schools[8] and the army of educational reviewers, upon whom the life and existence of a book depend, are too strongly wedded to the antiquated delusions of the past to receive such a series with favor; and it is hardly to be expected that a publishing house will expend one hundred thousand dollars or more in exploiting a series of books doomed to certain failure.

[7] In this matter the writer speaks from personal experience.

[8] The writer has in his possession a letter from the principal of a well-known normal school who flouts the idea that any training is needed in teaching geography, or that field-work is essential for the pupil. In his opinion all the geography required can be obtained from the railway folder.

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Nearly a score of years ago Professor Arnold Guyôt[9] gave a very vigorous emphasis to the plan of beginning the study of geography with an investigation of the physical geography of the schoolyard. In the main this idea is a correct one, and at that time the conditions were ripe for a favorable reception of the idea. The idea of Professor Guyôt took a vigorous hold, and soon became a popular fad. It was never really understood as a principle, however, and although a number of text-books were prepared on that line, they were compiled by editors so grotesquely incompetent for their work that the books were soon forgotten. And a reason is not hard to find. A teacher who carries his pupils through a brief course of elementary physiography, using the school district as a basis of study, must possess something more substantial than a method and a molding board. It requires not a little training in field-work on the part of the teacher; but a wide range of reading in modern geological literature is essential as well. In other words, the laboratory method must be applied to the study of physiographic geography, if the work is to be well done; the teacher, moreover, must possess a better knowledge of the subject than can be acquired by the perusal of an ordinary school text-book.

The second and more practical side of physiography is its economic aspect, that is, the geography of commerce. Not only are the principles of physiographic geography closely interwoven with those of political economy, but the latter may be considered as the industrial department of geography. It is the fortuitous distribution of coal and iron, of cultivable lands and rainfall, that makes great nations; statesmen, powerful armies, and impregnable navies are comparatively trivial matters. The future of the North American empire is wrapped up in the wheat fields of the Mississippi Valley and the mineral deposits of the highlands. The narrow gap through which the Mohawk flows is a physiographic incident of which Greater

[9] It is well to bear in mind that the books bearing the name of the eminent geographer were not written by him. Some of them were written since his death. The *Physical geography* is the only authentic text-book of Professor Guyôt's.

New York is the result. The deficiency of a few inches in annual precipitation relegates the whole region of the plains to the cattle herder, and reduces its capabilities of development ninety per cent. A canal across the Isthmus of Panama, or through Nicaragua, by bringing San Francisco nearer to London than Calcutta now is, would open European markets to the food stuffs of the Pacific coast of the United States, and modify the commerce of the whole world.

It is the consideration of questions of this character that places the science of geography among the *Brodwissenschaften*, and brings political economy within the domain of physiography. Indeed, whatever the practical man of commerce may choose to omit from the studies he considers necessary for a business education, economic geography in its physiographic aspect is not one of them.

JACQUES W. REDWAY

MT. VERNON, N. Y.

Other important articles on various phases of Geography and Physiography have appeared in the EDUCATIONAL REVIEW, as follows :

The teaching of geography, by Professor William M. Davis (May and June, 1892) ; Geography in the European universities, by Hugh R. Mill (December, 1893) ; The status of geography teaching, by J. W. Redway (January, 1894) ; Applications of physiography to history, by J. W. Redway (November, 1894) ; Geography as a school subject, by Professor C. A. McMurry (May, 1895).

V

THE CORRELATION OF STUDIES

In the discussion at Cleveland last February, as well as in articles since, it has been positively asserted that the Report of the Committee of Fifteen has no allusion to the fact that the different sciences have a relationship with one another; that it does not, from principle, favor the idea of connected thought. Colonel Parker said at Cleveland that "the Herbartian doctrine and all other doctrines of concentration are ignored in this report, in their fundamental essentials." De Garmo declared "the text was there, but the discussion of the text was lacking." Dr. Harris himself contributed to spread this view of the report. He said at Cleveland that "the word correlation had no business to mean what the Herbartians make it mean," and asked "Why should they spring this use upon me?"

In an article since, Dr. Harris says: "Other than this essential correlation (dicusssed in the report under the title of educational values), there is, of course, only artificial correlation, and this," he adds, "was treated with sufficient thoroughness." In the report itself mention is made of what is called correlation by synthesis, and the German Herbartians are criticised for using *Robinson Crusoe*. The subject is then dismissed in these enigmatical words: "Your Committee would call attention in this connection to the importance of the pedagogical principle of analysis and isolation as preceding synthesis and correlation. There should be rigid isolation of the elements of each branch for the purpose of getting a clear conception of what is individual and peculiar in a special province of learning." Later, reference is again made to a species of faulty correlation wherein the attempt is made to study all branches in each, misapplying Jacotot's maxim, "all is in all." In letters to different school journals Dr. Harris has since

given the very much needed explanation that he meant this analysis and isolation in the sense of Herbart's first "formal step," which also is called analysis. He adds that the Herbartian "formal steps" are approved and adopted by the Report of the Committee of Fifteen.

The principle of isolation applies, however, not where the report seems to indicate (viz., in the plan for the curriculum), but in the daily lesson, and there only at one stage. Isolation is for the concrete details as such, because the essential nature of the concrete consists in being distinguished from something else. It loses its identity and individuality in proportion as it is grouped or classed or associated with other things. Correlation or association is for the abstract or conceptual as such; for its essential nature consists in comparison, classification by common characteristics, and, finally, the naming of the concept embracing these common qualities. But we must remember that concrete and abstract are only relative terms. What the mind operates with in all its thoughts partakes of the nature of both. The same idea may be a concept embracing subordinate percepts, and yet at the same time along with other similars it may enter into the formation of a higher concept.

Ever since the Report was published the war of words has been going on over the meaning of the name correlation. Several articles by prominent educators have since appeared, devoted entirely to a discussion of the meaning of the word. Meanwhile, what help are we teachers getting from all this? We want to know whether the wise men of experience think it desirable to interrelate the subjects of the curriculum and make one re-enforce the others, by letting the content-studies furnish material for the form-studies to work upon; and if they think well of such a proposition, we want to know how they would carry it out.

The Committee had the subject squarely before them, as shown by the questions for discussion sent out to various persons throughout the country soliciting contributions to be used in the preparation of the report. The following are the ones referring specifically to my subject:

"5. What should be the purpose of attempting a close correlation of studies?

"(*a*) To prevent duplication, eliminate non-essentials, and save time and effort? (*b*) To develop the apperceiving power of the mind? (*c*) To develop character? A purely ethical purpose?

"6. Is it possible on any basis to correlate or unify all the studies of the elementary school?

"7. If not, may they be divided into two or more groups, those of each group being correlated?

"8. Is there any way of correlating the results of work in all the groups?"

Here we have the questions squarely put, and the word correlation is used in the sense in which perhaps nine-tenths of those who think and read about the subject have recently heard it used.

In a recent article Dr. Harris sums up his view in the following words: "The report finds a deep underlying unity, and affirms the necessity of approaching this unity at all points of the course of study, but without the hope of reaching the fundamental unity until the period of higher education." He seems to think the evils of artificial correlation are so likely and numerous that he lays nearly all the emphasis on the dangers, and buries his recommendations deep down almost out of sight. Taken altogether, however, these recommendations, scattered as they are and vague too in many instances, are as certainly and plainly a demand for interrelation of the subjects of the curriculum as are even Mr. Gilbert's or Mr. Jones's dissenting reports. These passages, when collected together so that one will help explain another (*i. e.*, when "correlated"), make a very much stronger impression than when isolated. The following references are to the pages of this REVIEW, for March, 1895:

"Language rightfully forms the center of instruction in the elementary school" (p. 236). On p. 235 the report emphasizes the meaning of words, and insists on "setting the teaching process on the road of analysis of *content* rather than *form*."

"It is easy for any special discipline, when continued too long, to paralyze or arrest growth at that stage" (p. 239). "Those formal studies should not be discontinued, but *subordinated* to the higher study of literature" (p. 241). That is certainly the kernel of the theory of correlation as its best and wisest friends understand it.

Does anyone seriously doubt that Dr. Harris believes there is some natural and profitable correlation between reading, writing, composition, spelling, grammar, and literature? His treatment of all these under the one head of language shows his intention to interrelate them in the classroom.

Further on, correlation of the other subjects is demanded. "Inasmuch as reading is the first of the scholastic arts, it is interesting to note that the whole elementary course may be described as an extension of the process of learning the art of reading. First comes the mastering of the colloquial vocabulary in printed and script forms. Next come five incursions into the special vocabularies required (*a*) in literature to express the fine shades of emotion and the more subtle distinctions of thought, (*b*) the technique of arithmetic, (*c*) of geography, (*d*) of grammar, (*e*) of history" (p. 257). "It is thought by your Committee that the old style of composition writing was too *formal. It was kept too far away from the other work of the pupil.* Instead of giving a written account of what he *had learned in arithmetic, geography, grammar, history, and natural science,* the pupil attempted artificial descriptions and reflections on such subjects as 'Spring,' 'Happiness,' 'Perseverance,' 'Friendship,' or *something else outside of the line of his school studies*" (p. 280). "Your Committee believes that every recitation is, in one aspect of it, an attempt to express the thought and information of the lesson in the pupil's own words, and thus an initial exercise in composition. The regular weekly review of the important topics in the several branches studied, is a more elaborate exercise in composition." "Your Committee believes that there is some danger of wasting the time of the pupil in these oral and written language lessons in the first four years, by confining the work of the

pupil to the expression of ordinary commonplace ideas not *related to the subjects of his other lessons*, especially when the expression is confined to the colloquial vocabulary. It is clear that the pupil should have a dignified and worthy subject of composition, and what is so good for his purpose as the *themes he has tried to master in his regular lessons?* The reading lessons will give matter for literary style, the geography for scientific style, and the arithmetic for a business style; for all styles should be learned" (p. 281).

So, too, the need and advantage of correlation in geography and its relations to the other subjects of the curriculum are likewise set forth. Speaking of the improvement in the methods of instruction in geography, he says what formerly prevailed may be termed "sailor geography." "Little or nothing was taught *to give unity to the isolated details* furnished in endless number." "The industrial and commmercial idea is, therefore, the *first central idea* in the study of geography in the elementary school." "From this beginning, and holding to it as a permanent interest, the inquiry into the causes and conditions proceeds concentrically to the sources of the raw materials, the methods of their production, and the climatic, geologic, and other reasons that explain their location or their growth" (p. 250).

At considerable length the report points out how geography is to be correlated with the other subjects of the course. "It has been found that the lessons in botany, zoölogy, and physics give the pupil much aid in learning his geography and other lessons relating to nature, while history lessons assist very much his comprehension of literature and add interest to geography" (p. 261). One sentence sounds almost as if Colonel Parker had written it, so explicitly does it recognize the correlating value of geography. "Physical geography performs the work also of *correlating the sciences* that relate to organic nature by showing their respective uses to man" (p. 266).

When the report comes to speak of the dangers of the departmental plan for the elementary school, it lays the emphasis just where every advocate of correlation would lay

it. "In the elementary school, for at least six years, it is better, on the whole, to have each teacher instruct his pupils in all the branches that they study, for the reason that only in this way can he hold an even pressure on the requirements of work, correlating it in such a manner that no one study absorbs undue attention" (p. 285–6).

The philosophical unity of all knowledge receives attention likewise in the report. "For higher education seems to have as its province the correlation of the several branches of human learning in the unity of the spiritual view furnished by religion to our civilization. By it one learns to see each branch, each science or art or discipline, in the light of all the others" (p. 268).

I have taken thus much space to speak of the Report of the Committee of Fifteen on correlation of studies for three reasons: (1) because the impression has spread that the Report is against the idea of correlation of studies; (2) because it has been asserted that the Report ignores this sort of correlation and does not treat of it; (3) because a careful study of the references to correlation in the Report is well adapted to give us a clear idea to start with, in discussing the other proposals of plans for correlation.

To the latter we shall now turn. They are of two main kinds: (1) those of the first kind are plans that are based on the natural, causal, or other relations between the facts taught in the different subjects. The correlation of geography with history is of this kind. The relation between moisture, climate, soil, etc., and plant growth; the interdependence of plant life and animal life in the village pond, or between plant fertilization and insect life, are all examples of plain natural correlations. These appeal to everyone more or less. No one is so idiotic as to propose to teach each fact out of connection with every other fact. Nearly all of us would agree that this kind of correlation should receive the fullest possible scope; that those who make the course of study and the teachers likewise in their daily work should make it a cardinal principle, and should be at great pains to search out

natural and useful relations between the facts and subjects taught; in order that the whole curriculum may be an organic body of knowledge and not a chaos of odds and ends to be forgotten and never used because in no relation to other facts and hence never recalled. Of course, even the poorest scholar and the poorest teacher cannot help bringing some things into relation, so that there is, and always has been, some correlation of studies in every school. But the whole work is vastly improved and made more serviceable if thoughtful pains is taken to bring out other connections wherever possible, provided only that these associations are natural and therefore capable of later profitable utilization.

Is not the difference between the able and thoughtful man on the one hand and the shallow commonplace individual on the other hand, chiefly this—that the former has thought of the relations of facts to each other, and therefore sees everything in its true perspective, while the latter failing in this is swayed by the thought of the moment, and is unable to judge and weigh facts? Indeed, when we analyze our knowledge we find that it is all more or less relative, and the greater the number and importance of these relations with other facts, the more useful and the more available, too, in memory our knowledge becomes.

The chief part of such a plan of correlation, aside from bringing out these interrelations, as just pointed out, consists in the distinction between the *form-studies* and the *content-studies*.

By content-studies are meant "those upon which it is fitting that the mind of the child should dwell," and they include history, literature, and the sciences. This is the kind of studies that Spencer so emphasizes in his famous chapter on "What knowledge is of most worth?" By form-studies are meant "those that comprise the means or modes of expression by which thoughts are communicated," and include reading, writing, drawing, making, and modeling. They aim not at knowledge or understanding of man or nature, as do the content-studies, but at facility in the performance of certain, for the most part merely mechanical, activities.

When a pupil is reading, writing, or speaking, he should have his mind on the thought to be expressed. By forcing him to keep thinking of how he will say it, you make him self-conscious and produce the usual pitiful failures seen in the silly, awkward, self-conscious recitation or artificial commencement exercises.

This distinction is not that content is more valuable than form, as Mr. H. W. Brown's recent discussion in this REVIEW[1] assumed; for one is as necessary as the other. But the mind of the pupil should "dwell" on the *thought* he is expressing, not on how he expresses it. We all know *Punch's* squib:

> "The centipede was happy quite
> Until the toad in fun
> Said, 'Pray, which leg comes after which?'
> Which worked her mind to such a pitch,
> She lay distracted in the ditch,
> *Considering* how to run."

The child's mind is quite as easily distracted by being required at too early an age to direct itself inward to observe its own processes.

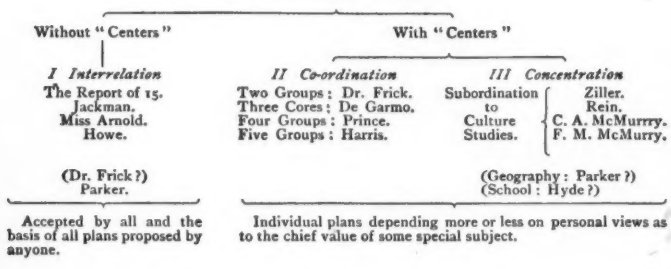
The cardinal principle then, with the advocates of such correlation, is that these various arts of expression, comprising the old-time curriculum of the three R's, shall be taught by constant reference to a noble and useful content. Therefore, says Dr. Harris, these formal studies of reading, writing, grammar, and composition should be subordinated to the study of literature. This does not require that these arts shall be taught *incidentally*, and that a child reciting in history or science work should be interrupted when he makes a mistake in expression, and the attention and time of the class be taken from the subject in hand by a five-minute digression on grammatical accuracy. It does mean that when he reads or writes he shall have something worth reading or writing, so that he can put his attention where it belongs, namely, on the thought expressed. When he writes a composition let him give a written account of what he has learned in arithmetic, geography, grammar,

[1] IX : 496.

history, or natural science. So says Dr. Harris, and so say we all.

That is, then, the first kind of plan for correlation of studies. The second kind of correlation accepts all of the suggestions offered by the first kind and goes one step further. It insists on a subordination of all the studies to one or more main ideas, which thus become centers or cores about which to group the other subjects. For this kind of correlation we may with more propriety use the term concentration. De Garmo has appropriated to his own plan the term co-ordination, and to this use of words I shall conform. We have then the following table of the different plans for

THE CORRELATION OF STUDIES



To these might be added "surgical concentration," which proposes to "concentrate" by amputation of all the subjects except two or three at a time. This plan has a periodic advocacy. Its present champion is Mr. Samuel Thurber of Boston.

It is to be noticed in the above table that all advocates of co-ordination and concentration accept and emphasize interrelation; all advocates of concentration accept and emphasize both interrelation and co-ordination. With all plans there is a tendency toward concentration, although advocates of mere interrelation or co-ordination stop short of completeness. These facts will explain, I think, the great confusion in the use of terms at present. There can be no question that "correlation" is the larger generic term and includes all the other more specific plans under it.

It seems to me impossible to discuss the subject of correlation without taking into account the difference in children at different ages. The primary school may perhaps need a plan for concentration something like the one advocated by Rein and the McMurrys; but the upper grammar grades will do better with a co-ordinated curriculum such as Prince and De Garmo defend; while high school and college students can dispense with the more or less artificial aids involved in these plans, and depend merely on the natural and causal interrelation of the facts in all subjects of study. The more advanced pupils then begin to appreciate "the higher philosophical unity" of which Dr. Harris speaks in the Report, and "which does not lie on the surface, and therefore cannot be developed in the elementary school." It is, therefore, a great mistake to suppose that the different plans for correlation are opposed to one another. They are, as was pointed out above, rather to be considered as different *stages* of one plan, and are applicable to children at different periods of development. The young child *feels* the oneness of nature and of life. "The nursery is the place where study is most general and universal" (President Hyde). To the six year old pupil the division of study into subjects has only just begun. Zoölogy, botany, meteorology, geology, agriculture, horticulture, astronomy, etc., all commence in the undifferentiated form of nature-study. The same is true of language work, history, etc. The proper correlation for primary schools is found, therefore, in the lack of that isolation and analysis which the Report of Fifteen says should precede synthesis and correlation. This also conforms to the facts of racial development. The child but repeats the history of the race when his mental life thus begins in general culture and unspecialized knowledge. The differentiation of studies should, of course, increase with the age of the pupil, even as it has done in the history of mankind. I must therefore repeat, plans for correlation that take no account of the stages of child development are artificial and impracticable.

While it seems most correct to class together the correlation

advocated by the Report of the Committee of Fifteen, and that worked out by Mr. Jackman of the Cook County Normal School, that by Miss Arnold while at Minneapolis, that by Mr. Howe of Champaign, Ill., and that by the late Dr. Frick, Director of the Frankeschen Stiftungen in Halle, Germany, as not based on any "centers," and therefore as different from the idea of concentration, yet I think the tendency with every one is to emphasize some one subject or principle, and to give it the right of way with a greater or less domination over the other studies. Such subordination of the subjects to the culture studies is what some people mean when they talk of harmonious development.

Dr. Harris, in the Report, makes *language* the center, and all the other studies are so many incursions into the surrounding country from this one citadel and base of operations. Jackman and Howe are teachers of science, and with them *science-work* takes the lead, dictating more or less the work in reading and the other subjects. With Dr. Frick the backbone of the curriculum, after the primary grades are passed, is *history*. The pupils trace with elaborate care the growth and development of the German people. This being the case, it is natural that the environment of the pupil—local, State, and national—should receive the chief emphasis.

Miss Arnold's course of study for the Minneapolis primary school follows essentially the same plan. "Nature-study, literature, and history form the central lessons for each day. With these all the rest of the work is as far as possible related. Thus the child studies corn, for example, in his science lesson. He learns more about it in his reading lesson, writes the description of the plant for his language work, draws leaves and tassel in the drawing lesson, and learns to spell the terms necessary for his description. He sings the 'Harvest Hymn,' commits to memory Whittier's 'Corn Song,' or reads Longfellow's beautiful version of the Indian myth. The farmer's life, with its strong and manly labor, and our dependence on it, is made the subject of frequent talks. In this way nature

and human life furnish the themes and the lessons in *form* follow of necessity to express the thoughts gained."

All of these plans tend more or less to centralization. Indeed, I cannot see that any plan of correlation can be regarded as a satisfactory solution of the problem for the elementary school, if it does not center the studies into a few groups, though perhaps not about one single study.

This question of grouping which the Committee of Fifteen had so squarely before them and utterly failed to answer, is the one that is most important and most difficult, and one that should never be left to the individual prejudices of the teachers. The Committee's questions very nearly amounted to asking: (1) Is complete interrelation possible? (2) Is co-ordination preferable? (3) Is some form of concentration practicable? They have done a good service in simply *asking* these questions, even though they have not answered them.

Outside of the Committee, however, various proposals have been made. Some have advocated several centers, but others, with greater consistency perhaps, though with greater narrowness, have recognized only one center, and that the study that serves the one chief aim of character-building. These two kinds of correlation with centers are, then, first *co-ordination* advocated by De Garmo, Prince, Hinsdale, and others; secondly, *concentration*, which perhaps may be considered to be the German Herbartian proposal. It is prominently advocated by Ziller, Rein, Dörpfeld, the McMurrys, and, in a modified form, by Colonel Parker. I shall take these up in order.

President De Garmo, who is no doubt the best versed in the Herbartian ideas of anyone in this country, and withal one of the most independent and original in modifying them to adapt them to our conditions, has proposed "to have three co-ordinate, but more or less distinct, cores or centers of unification, having constant cross-relations wherever the nature of the subject matter and the convenience of the classroom make them advisable." Literature and geography assume in this plan the nature of universal correlating studies, since the concrete

matter of all three cores has both literary and geographical aspects. The three cores are as follows:

(1) "The humanistic group of studies, having a distinct ethical content in literature and history, and a historical development as seen in the culture epochs through which civilization has passed. Language study becomes, therefore, merely the formal part of literary and historical study. Were instruction in this branch of elementary education nothing more than lessons in composition, spelling, and penmanship, it might be made purely incidental to the other work. This is, however, not the case. While, therefore, English grammar maintains its place as a separate study, the subject matter of the concrete language exercise is to be taken from the material of literature, history, and nature-study." This, of course, agrees essentially with the recommendations of the Report of the Committee of Fifteen.

(2) "The nature group of studies have no specific ethical content, and no long progression from primitive to higher and higher truths, since for the most part these studies have all been developed during the present century. Mathematics is the formal aspect of nature-study in its quantitative relations, just as language is the formal side of the humanistic studies."

The denial of ethical content to nature studies is strongly contested by Jackman, and, I think, with abundant reason. The idea of evolution is the greatest power in the present age toward reorganizing our whole system of ethics, and revivifying our religion, history, and art. The denial of culture epochs in science is also refuted by Beyer, as pointed out by Van Liew in the Herbart Society Year Book for 1895, vol. i.

(3) "The economic core represents the two factors, man and nature, in interaction, and is at once a principle of application for all studies and a specific department, as seen in such subjects as manual training, industrial art, mechanical drawing, commercial geography, and the like." De Garmo concludes his plan with a few practical considerations regarding the correlation of these three groups with one another. These are essentially the same as those Dr. Harris recommends in his report:

viz., that the reading in the form of literature pertains alike to culture, nature, and economics, and therefore may be made the means for bringing about close associations among the realms of knowledge; secondly, that geography, in its various aspects as political, physical, and commercial, comes into touch with all the other subjects, and in a certain sense is an all-embracing and unifying study.

Now, these considerations seem to me utterly misleading; for literature and geography are each of them loose groups of studies without any innate unity at all. The mere fact that books on art, natural science, economics, etc., are classed together as literature does not bring these subjects into any real relation. It seems absurd to speak of one subject as being able to correlate other subjects.

Dr. John T. Prince has proposed a quite different plan of coordination for grammar and high schools. The chief features of his plan, indorsed in the main also by Superintendent Tarbell, are as follows: (1) The subjects of instruction should be separated into groups of related subjects. (2) Each group of subjects should be given in charge of one person, to be taught by him with such assistance as circumstances will permit. (3) Each head of department, or special teacher, should have charge of the same pupils for at least four years. (4) If there are two or more teachers for any group of subjects, there should be constant consultation of teachers, with reference to the close correlation of all the subjects of the group. (5) There should be frequent conferences of the teachers of all groups, to consider what correlation of all subjects may be made. The proposed grouping of subjects is as follows:

I. *Knowledge relating to man*

1. Biography and history. 2. Political geography. 3. Civil government.

II. *Knowledge relating to the earth*

1. Geology. 2. Zoölogy. 3. Botany. 4. Physics. 5. Chemistry. 6. Physical geography.

III. *Knowledge of space and quantity relations*
1. Arithmetic. 2. Geometry. 3. Algebra. 4. Applied mathematics (mechanics, astronomy, etc.).

IV. *Expression*
1. English and foreign languages: (1) Reading, (2) grammar and logic, (3) composition. 2. Drawing. 3. Manual training. 4. Music.

Except in subjects of the fourth group, only one subject of a group is intended to be studied at a time as a central subject correlating the others of its group with it. Reading, composition, and drawing should be constantly correlated with the subjects of the first three groups. Dr. Frick's two groups are those so universally recognized—man and nature. This is also the grouping almost everywhere accepted by the Herbartians.

Dr. Harris has elsewhere advocated a fivefold co-ordination of studies: (*a*) Nature, comprising (1) science, or in the elementary grades, geography; and (2) mathematics; and (*b*) Man in his threefold aspect of intellect, feeling, and will, comprising (3) grammar, (4) literature, and (5) history.

With Ziller and Rein, "*the growing personality of the pupil is the center, to which all the multiplicity of interests and new ideas must be related*," and therefore their idea of concentration is that "of unification of the manifold subjects in instruction in the growing personality of the child." This is also Parker's idea, and it is, I think, undoubtedly correct. The growing mind of the child is the center in a sense in which no one subject, such as history, literature, or science, ever can be.

Perhaps the most distinctive characteristic of the plan of Ziller and Rein, as compared with all the other proposals thus far mentioned, is, that they make their principle of concentration the basis not only for the correlation of studies, but for the choice of studies as well. For each school year they demand the presentation of a rich culture material of organized knowledge adapted to the child's stage of development and apperception. Secondly, they demand that for each year all

the other studies shall be properly interrelated with this leading culture material; so that the work of each year forms an organized whole in the interest of character-forming. These other studies help to supplement and complete the realization and appreciation of each stage of moral development of the race. For Ziller and Rein life is a question of moral worth primarily, and all the rest, wealth, honor, knowledge, ability, power over nature, progress and skill, material resources, and all the arts and sciences are but *accessories* to make a background, to furnish the stage and scenery, where the moral revelation of the world is presented to the pupil.

Ziller applies this principle to the choice of subjects for the curriculum as follows: There should be taught: (*a*) Whatever is directly necessary for the full understanding and the exact characterization of the culture content; (*b*) Whatever will help show the connection of the facts of progress in culture and ethical development; (*c*) Whatever studies serve as a preparation or interpretation of the culture material for the individual understanding of it; (*d*) Whatever studies serve to nourish and extend the interest roused in the culture material.

Ziller and Rein would, however, distinguish between studies that *directly* and those that are only *indirectly* associated with the culture material. They would not insist that everything taught must have a direct connection with the development of a moral character. Their view is rather this: that the development of a moral character being the chief aim of education, everything that helps to develop a sound and healthy mind in the pupil is in so far directly or indirectly connected with the development of his moral character. Of course, with such an interpretation of the principle, they practically admit all subjects to the curriculum that we do, but the point of view is interesting and suggestive, and involves a difference in the treatment of the several subjects in the programme. For, the German Herbartians deny the right of these other studies to be considered as independent and isolated subjects, as is done by the special and departmental teachers, and as is demanded

by the necessities of scientific investigation and the like in university work, for instance. Accordingly, the concentration is aided, (1) by the fact that all the subjects are chosen with reference to the culture material, and hence are thus associated together; (2) by the culture quality and historical direction of all the instruction in all the subjects.

It was, of course, to be expected that such a theory would maltreat the sciences, mathematics, and physical education. Misunderstanding the principles involved, many Herbartian teachers in Germany have been led to subject all of these studies to the literary method, science work has degenerated, and mathematics has taken on an artificial and far-fetched resemblance to a reading book. All of this is vicious and unnecessary. The subordination of the other subjects need not and should not extend to the method of teaching them. But this subordination is much nearer being right than is the all too common logical and scientific method of nearly all the text-books. The demands of apperception and interest would be more likely to be fulfilled by a teacher inspired with a faith in the Ziller-Rein theory of concentration, than they would by the average teacher of specialties.

To make this matter of subordination of subjects clearer, let me take an example from Rein. Geometry begins in his curriculum in the fourth school year and continues throughout the rest of the course in the Volksschule. I choose this subject because it is one of the most difficult to bring into subjection to the principle of concentration, and is one of those subjects that we usually insist shall have its own principle of development, and not be a servant and slave to some other.

Rein states the object of the course in geometry to be to develop in the pupil, through insight into construction and calculation, the ability to exercise the full mastery over form and figure for the purposes of life. Hence educative instruction cannot treat scientific mathematics; its work must be limited to the needs of solution of practical problems. What interest can the child possibly have in knowing, for instance,

that the sum of the angles of a triangle is 180°? He would quite as lief that they made 200°. It is the practical problem taken from the incident of the child's life that attracts his attention and makes him *want to know*. This "wanting to know" is for Professor Rein an absolutely indispensable condition of all educative instruction. Of course, the lessons in natural science and the object lessons in the different studies furnish these practical problems. This is essentially Mr. Jackman's plan at Chicago. But the subordination does not control the order of topics, as one sees from the following: Rein begins with the observation work on the cube or other simple form, to develop the fundamental ideas of body, surface, line, and point. Then the synthetic order is pursued from point to line, angle, triangle, quadrilateral, polygon, circle, and solid body, following the working out of every geometrical theorem with an abundance of problems in construction and mensuration taken from actual life. Ziller and Rein make the practical problem, therefore, the starting point as well as the end of all geometrical instruction.

In the fourth and fifth school years the simpler forms, cube, square, and oblong prisms (or parallelopipeds), and the polygonal pyramid, cylinder, cone, and sphere are drawn, modeled, measured, and the concrete ideas which are to be the basis of all the later work are obtained. In the sixth and seventh years the work is more properly geometry, consisting of the most important theorems, constructions, and applications in plane geometry in the sixth year, and in solid geometry in the seventh year. The eighth grade have the more difficult theorems in regard to equality and similarity of figures and the Pythagorean theorem. Mensuration plays a large part in all the work. Maps are made, to scale, of the school yard, gymnasium, playground, and schoolroom. The area of these surfaces is calculated. Distances are determined that cannot be directly measured, etc.

The McMurrys have not in any essential feature departed from the principles of Ziller and Rein, but they feel that the problems are as yet still largely unsolved. Charles McMurry

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thinks that "by omitting some of the topics suggested in the culture subjects, and enlarging upon others, developing the notions of classes and principles so far as is desirable, the natural science lessons may be made sufficiently scientific without losing the close relation to the central subject matter for the year. There is no doubt that the science lessons will add greatly to many topics suggested by the stories, and will bring the whole realm of nature into close relation to history and geography." Dr. Frank M. McMurry has given an excellent presentation of the subject in the Herbart Society Year Book. He, however, still insists on a concentration about one subject of study, making literature the center for the lower grades and history the center for the upper grades. He declares that the idea of making the child the center is based on a confusion of ideas. Apperception deals primarily with the relationship of the studies to the child; but concentration has to do with the relation of the studies to one another. He would subordinate some branches to others in order to secure the closest connections; "but any attempt to make all the studies directly dependent on the center alone would at times prove very artificial." The arguments here so forcibly and clearly presented by Dr. McMurry are just as applicable to all other schemes of correlation, and I fail to see any sound reason advanced for the subordination of one subject to another. Abundant and cogent arguments are given in the paper for making the ethical element in every study the center of school work, but none, I think, for concentrating on the ethical element in any one subject alone.

Colonel Parker's theory of concentration, as given in his recent volume of *Talks on pedagogics*, is so delightfully vague, and all-embracing, that you cannot object to it as being narrow, but you can object that he has not made himself plain. Some things that he says are undoubtedly good, and the general trend of the book is sound and inspiring, but as you read it you wish to goodness there was more application of concentration to the matter in the book itself, so that, when you finally finished the 451st page, you might know what in the world it

all meant. I do not believe I understand Colonel Parker, and therefore cannot do him justice. He does certainly lay great stress on the child mind as being the basis and reason for the concentration. The child even in its early years makes a beginning in all subjects of thought. His plan is rather "expansion" from a center, than concentration about a center. It is, I am afraid, in other ways, too philosophic for even teachers to understand, let alone the youngsters for whom it is intended. He takes strong ground against the idea of formal discipline, and insists, as do we all, that actual, concrete knowledge of the same sort as has constituted the child's experience before the school age, shall continue to be the material through which all form is to be taught.

In conclusion, I may sum up the demands of correlation in somewhat the form expressed by Rector Dörpfeld, one of the clearest and most level-headed of the German Herbartians. There should be:

1. Normality of the curriculum, *i. e.*, the full number of branches; or, as Dr. Harris puts it, all departments of human learning must be represented. This demand is as much opposed to a narrow view of concentration (with *Robinson Crusoe* for a center, for instance), as it is to the surgical plan of Mr. Thurber.

2. Unified departments of study; *e. g.*, the work in language, as Dr. Harris points out, embracing as it does, reading, writing, grammar, spelling, literature, and composition, must itself be unified by correlation.

3. Interrelation of all the branches in teaching, according to their several characters: (*a*) Of the thought and language studies, (*b*) Of the thought and form studies, (*c*) Of the branches of the thought studies among one another.

4. Central position of the culture material in all the studies in the service of character building.

5. Adaptability of the correlation to the progressive stages of child-development.

HERMAN T. LUKENS

CLARK UNIVERSITY,
WORCESTER, MASS.

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VI

DISCUSSIONS

SPIRITUAL INCONGRUENCE

In the discussion of Dr. Hinsdale's great paper at Denver, on "The laws of mental congruence and energy," [1] Dr. Soldan precipitated the question whether the frequent change of teachers is not a disadvantage to the child as he advances through the grades of the school. The time of the Council did not permit a full discussion of this phase of "congruence," but the trend of the remarks made by some eminent authorities was to stamp the custom of changing teachers with the change of grade as an illustration of "spiritual incongruence," and to favor the restriction of the child to one teacher during at least a part, if not the entire period, of his elementary education.

In the great majority of the graded schools of this country, classes are promoted annually or semi-annually; in a few instances they are advanced every three months, and possibly oftener. The promotion of classes may or may not involve a change of teachers. Usually, however, the teacher remains permanent, while the class in its progress encounters a new teacher at each stage. It is urged that this change of teachers with the change of grade is morally and spiritually a disadvantage to the child, inasmuch as it breaks the continuity of that spiritual influence which makes for character; that in sundering old attachments to form new ones, there is a tendency to render the child heart unnaturally callous, and that the emotional disturbance caused by interference with the current of established affections tends to produce moral insensibility and spiritual demoralization.

The time element in this, as in many other school problems, is of the utmost importance. There is a vast difference between a change of teachers every three months and a change every year. In the former case the objections urged may be admitted as valid, while in the latter their validity may be questioned. The teacher should certainly have charge of a

[1] EDUCATIONAL REVIEW, X: 152.

class long enough to know her pupils, to study their individual characteristics, and provide for their individual needs both in discipline and instruction; she should remain in charge long enough for the children to study her character, and to appreciate that which is high and ennobling in her life and personality. It requires time for the pupil to absorb that spiritual influence which silently radiates from the teacher and creates the moral atmosphere of the school. But it must not be forgotten that there is a limit in time to the teacher's power to provide for the child as well as to the child's capacity to absorb from the teacher. When this limit is reached, a change is demanded in the interest of both teacher and class. It is important that we ascertain what are some of the effects produced upon the child by the system of promoting the teacher with the class from year to year. Naturally, it will be claimed that much depends upon the teacher. But in this discussion we must take it for granted that the teachers are of the right kind, possessed of a noble character, rich in culture and in the graces of an attractive personality. Would the frequent change of teachers, under such circumstances, conduce to the best interests of the child? "What would be the effect upon the child if he were given a new mother every three months," is a question asked in this connection. Again it may be said that much depends upon the mothers; if all are equally kind and good and noble, would the change, after all, prove a very serious detriment to the child's spiritual growth? But it must be remembered that the relation of the mother to the child is, and always must be, very different from that of the teacher. Motherhood is a natural and permanent relation, and, when once severed, it can never be replaced, except in name. The old analogy by which the teacher is placed *in loco parentis* is used simply to express a legal and temporary relation, and in so far as parental functions are assumed by the teacher, they are necessarily weak and artificial.

Character is complex. The process of its complete development requires concentration and divergence, permanency and constant change. Nature has wisely ordained a fixed center in the home—the mother. The child's school life is but the circumference of an ever widening circle, whose center continues to be the home. In this center the child finds a fixed ideal; in the circumference he meets with continuous change. Later on, the center is modified into the family, and the cir-

cumference expands into the ever-changing phases of social and civic life. As the true measure of the real life of the child, as well as of the man, is the circle that it occupies, all the forces of that life, centrifugal as well as centripetal, must be developed in perfect harmony. The sundering of ties and warm attachments in the circumference becomes a source of moral and spiritual strength rather than of weakness to the child. Indeed, when the relation of teacher and child becomes one of personal affection, it is invariably detrimental to the child. This idea fully accords with the law of the primary psychic elements, as stated by Dr. Hinsdale: "Until the mental current reaches a given height, cognition, feeling, and will swell together. That point reached, any one of the three must swell at the cost of one or both the others." When love, in the sense of personal affection, dominates the child's school life, there results a corresponding weakening of the cognitive and executive faculties. Love for the teacher may serve as an incentive, but never as an adequate motive for right doing.

To confine the child to the influence of one teacher during his course in the elementary school, or even during a considerable part of that course, is to circumscribe his moral and spiritual life. It arbitrarily limits his opportunities and narrows his character; it grooves his personality and restricts his spiritual nutriment to that which he is capable of absorbing from a single source. The "one-study college" mentioned by Dr. Hinsdale is not more fatal to the mental development of the student than is the "one-teacher school" to the child's moral and spiritual growth. If the school is to contribute a large spirituality to the child's future, it must enable him to live more richly and more abundantly in the life that now is.

Further, it is conceded that the best product of the school is the result not of imitation, but of assimilation. With but one teacher as an ideal for a series of years, the child is in danger of becoming little more than a mechanical duplicate of that teacher. Individuality is sacrificed, and originality in habits of thought and ideals of conduct is impossible. In many instances, no doubt, where the teacher is endowed with the elements of a rich and commanding personality, such idolatrous imitation may not prove wholly disadvantageous. But the fact remains, true in the moral and spiritual as well as in the mental and physical life of the child, that his real progress is in proportion to the activity of his individual energies. It

is only by the practice of self-direction and self-adjustment to new conditions that the child can attain to that strength and flexibility of character which make the life purposeful and exalted.

Experience and observation teach us that there is a time limit to the pupil's power to absorb and assimilate spiritual influences from any teacher; beyond this point spiritual fatigue ensues. Dr. Hinsdale's application of the law of "mental fatigue" to the intellectual activities is equally true in the child's spiritual life: "Persistent application on a stream of falling energy involves waste of time and power;" and whether the proper remedy be a "change of method" or "change of teacher," the sooner it is applied the better. Spiritual fatigue also may be "specific or generic," and "diminished power" for one activity is not diminished power for all activity. Failure of spiritual growth under one teacher, and under a given set of conditions, does not imply failure to grow under any conditions. It is by no means unusual to find a child, sullen and morose under one teacher, bright and happy under another; under the one the spiritual energies are paralyzed; under the other they are vitalized and quickened into healthful activity and power. Teachers who have taught a class of children continuously for several years often ask the superintendent for a change because they feel, and candidly confess, that they have been "absorbed." There are some exceptional natures in almost every class that suffer to some extent under the best teachers; and the average child, if continued for a series of years under even an exceptionally strong teacher, will manifest unmistakable signs of spiritual fatigue and languor. If a new teacher is to take charge of the class, the average pupil is eager to start to school; his anxiety, curiosity, and enthusiasm are unbounded. This spiritual hunger for a larger life cannot be appeased until with flushed cheek and beaming eye he sits facing the new teacher. With the same teacher from year to year, there is wanting an important element in spiritual acquisition—this intense expectancy—this attitude of complete receptiveness. Too many children become weary of school life without apparent cause, and withdraw before their elementary course is completed; especially is this true of the boys in the higher grades of our city schools. Many reasons are assigned to account for this, but may we not find the underlying cause in the fact that the child's aspirations for a

larger and richer life are not met and satisfied by the school? The growing, aspiring boy is sent to school to a young girl whose circle of life and experience is much more limited than his own; he exchanges the school for the larger life of the shop or the office, and ingenuously informs the teacher that he has "quit school to go to work."

Another weighty consideration in the development of character is the proper adjustment of the child to his spiritual and natural environment in the civilization into which he is born. This form of correlation has been very adequately treated in the Report of the Committee of Fifteen, so far as it involves the educational values of the several subjects of instruction, but the correlation of the teacher with the child and his future seems to be even more important than the correlation of studies. The school is to produce an "adjustable boy," not simply in physical and intellectual endowments, but also in those deeper spiritual lines which will adapt him for the highest degree of usefulness as a member of society and a citizen of the commonwealth. This general doctrine is concisely expressed in the often quoted and more often ignored formula —*non scholæ sed vitæ*. If the child were born into a monarchical government, characterized by unchangeableness in the *personnel* of the ruling class, a similar condition might appropriately characterize his school preparation, in order to adapt him to the spirit of his civilization. In a republic, however, he must be able to adjust himself to frequent changes in civil rulers as well as changes in the conditions and demands of community life. As the child advances from grade to grade in the school, the class with its varied constituents remains permanent, a fitting prototype of the larger community life whose varied interests he must soon share; while the teacher foreshadows, to some extent, the character and dignity of ideal official life in a republican government. A change of teachers at intervals necessitates in the child that spiritual readjustment which in the end results in the adaptation of the man to the tenor and spirit of the civilization of which he is a part. All the means and processes of the school should thus have in view the correlation of the child with his future environment in social and civic life.

J. H. PHILLIPS

SUPERINTENDENT OF SCHOOLS,
BIRMINGHAM, ALA.

VII

REVIEWS

Friedrich Froebel's Pedagogics of the kindergarten—Translated by Josephine Jarvis. (*International Education Series.*) New York: D. Appleton & Co., 1895. 337 p. $1.50.

This volume of translations of Froebel will doubtless find a hearty welcome from all kindergartners who have not been able to refer to the writings of Froebel in the original, and who, in consequence, have had to depend upon manuscript copies laboriously made and carefully handed down from one to another, much as were the valuable manuscripts of the Middle Ages; and, I may add, that much of the same holding on to the letter, rather than the spirit, has sometimes resulted.

It is plainly evident to the deeper student of the kindergarten that Froebel shared in the philosophic movement of his time, though in his own peculiar and most interesting fashion. With Kant and Fichte, Schelling and Hegel, he emphatically distinguishes between the inner and the outer, the self and the other, the subjective and objective *ego*. This is most distinctly brought out in his *Mutter und Kose Lieder*, of which Miss Susan Blow has recently given us such a fine, free translation. Of this book he himself says, "I have here laid down the most important part of my educational method." Still, his philosophy, as well as his psychological methods, is stated in the *Pedagogics* in his elaborate explanation of ways in which the Gifts may be used, and his interpretation of the value of the same to the child.

The book contains very wisely selected portions of the fragmentary writings of Froebel, which were left in a somewhat scattered condition at the time of his death, and which were afterward collected by Dr. Michaud Lange. It begins with a kind of prelude, as it were, entitled "A New Year's Meditation," which has been appropriately placed at the front of the book, giving the reader a glimpse of the man Froebel before beginning the study of his work. Then follows his plan for an institution for fostering the child's creative activity. To the educator of to-day this is an interesting revelation of the germ out of which the kindergarten afterward evolved. It also

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shows his insight into the fact that the nursery is the laboratory in which future psychologists will make most of their researches. On p. 29 may be found a clear statement of the psychological views which run throughout all Froebel's writings. In fact, the second and third chapters are saturated with "Froebelian philosophy," in true Froebelian nomenclature.

The following ten chapters are on the first five of the kindergarten Gifts. In the first chapter on the Ball, after giving the mother directions for some exceedingly simple games, such as putting the ball into the hand of the infant and then suddenly pulling it out of his hand by means of a string attached to the ball, he adds (p. 37): "From these perceptions there at once develop in the child's mind the three great perceptions of object, space, and time which were at first one collective perception." I quote this sentence almost at random, but as a characteristic one, as illustrative of Froebel's way of showing the universal in the particular. He sees in all unfolding of the senses, and all impression received from the external world, a distinct unfolding of the inner nature, an indelible impression upon the spirit of the child.

The narrowness which has led some kindergartners to the use of the type-form to the exclusion of all others, and which of late has been justly criticised, cannot be traced to Froebel. Although he heartily believes that the geometric forms underlie all forms of creation, and, as the A B C of the great language of form, ought to be the familiar playthings of the child, he nowhere shuts out the use of other and more familiar objects. He says here (p. 50), as well as elsewhere when speaking of the other Gifts, "In order to increase the power and advance the development of the child, the plays carried through with the ball are, as the opportunity or the demand is made, given with other objects, for example, an apple, a handkerchief, a ball of thread, a key, a nut, a flower, etc."

In his chapter on the Second Gift we are introduced into what is often called Froebel's "absurd mysticism," but what is in reality only an acknowledged point in all psychology, *i. e.*, that the imagination is awakened and directed by the sense-impressions. In other words, that the inner nature of the child is fed by the kind of material objects with which his activity employs itself.

We have brought out in the chapter on the Third Gift the same thought, the directing of the spiritual growth of the child

by the right kind of objects. Froebel here distinctly states that the use of this divided cube is not simply to teach divisibility of form or number; nor does its chief significance lie in the fact that its simplicity invites the constructive rather than the destructive play of the child's powers; but rather that the continued use of it gives to the young mind a presentiment or foreshadowing of "the spirit of unity of all life."

After showing how each of the eight small cubes should be used, in each form created by the child, Froebel adds (p. 131): "So with this plan, nothing need ever exist without relation to something else, nor must anything appear without relation, as in actual life nothing ever exists separate and without relation. To develop man's inner as well as his outer eye from an early age, for the near and distant relations of life, is one of the ultimate and highest aims of these plays." Again and again he speaks of "the inner speech of things," showing that he belonged to that class of minds which finds books in brooks and sermons in stones. The difficulty which many people have in understanding Froebel is that they go to him expecting to find merely another German philosopher, or at most only a profound teacher of a new pedagogy, whereas his greatest merit is that he is a poet and inspires all his true followers with the poetic conception of nature and of man, of God and his universe, which inspiration Mr. Hamilton Mabie has described as "a divine enthusiasm for hard work."

The remaining chapters on the Fourth and Fifth Gifts follow the same general line of thought.

The very interesting chapter on the "Movement Plays," when compared with Newell's *Games and Plays of American Children*, teaches us how the elements which psychologically attract the child in the old historic games of the street may be retained, purified from their coarse and oftentimes debasing suggestions. The limits of a magazine article forbid the discussion of this not generally understood phase of Froebel's work.

The book closes with a chapter on "How Lina learned to write and read," which no doubt will bring down a storm of criticism from the advocates of "sentence methods," but which I most devoutly wish every primary teacher and every mother in the land might read and take to heart.

ELIZABETH HARRISON

KINDERGARTEN COLLEGE,
CHICAGO, ILL.

XUM

An Introduction to the study of society—By ALBION W. SMALL, Ph. D., Head Professor of Sociology in the University of Chicago, and GEORGE E. VINCENT, Vice Chancellor of the Chautauqua System of Education. New York, Cincinnati, Chicago : American Book Company, 1894. 384 p. $1.50.

In some reviews of Small and Vincent's *Introduction to the study of society*, whether from a sense of duty or because it is pleasant to look down from an assumed elevation, the various writers have endeavored to belittle this pioneer work. It is a pioneer in the same sense that the occupants of the "prairie schooner" (p. 101) are pioneers. These people were not the first and only representatives of their race who have built and resided in a hitherto unoccupied field, but they were the earliest occupants of a particular locality in the then unsettled West.

It would little become some chance explorer from the cities of the East to criticise the hinges on the barn door of the first settler because they were not of steel and brass, or to say that brown stone would have been in better taste than logs for a residence. The settler was forced to use the materials at hand. There were in his vicinity no experts in the industries upon whom he could call for materials and assistance; but he made a home fit to live in and so used the few tools he brought from another home as to be justly honored by those who came later to the growing community, and who had a better chance for progress than he.

Professor Patten objects to any use of "biological analogies in the discussions of social questions." Professor Giddings is very certain "that sociology must abandon the biological terminology," and Professor Powers says that "it cannot be too strongly insisted that a science of society cannot be constructed out of vague biological images." In making these statements the writers named do not refer to the essential portions of the book, for the authors frequently mention that they do not insist upon biological comparisons. I am not desirous of combating any of these statements of earlier reviewers, but will rather inquire, Is a man to be prohibited from using a needle because no sewing machine has been invented, or from traveling by rail or ship because flying has not yet been proven a success?

Small and Vincent say on p. 90, "The use of the term 'Anatomy' does not compel us to find analogies between societies and different kinds of animals where none exist, or be-

tween every part of society and some part of an animal body." On p. 169 I find, "Again we warn the student against the dangers which lurk in analogies between the social organism and any particular zoölogical type, such as the human body. It should be borne in mind that certain relations of coexistence, interdependence, and growth are exhibited by the associated life of men, and that it is upon these essential relations, not upon fanciful similes, that the organic theory bases its claim."

One reviewer would dismiss the book from college halls by the following: "The attempt to make one book for the college classroom and for Chautauqua is a mistake. It inevitably results in a book for Chautauqua."

When all has been said, of this nature, that can be said, it still does not follow that Small and Vincent's *Introduction to the study of society* is not a very useful book. It certainly accomplishes what it claims, on p. 99, is one of its objects, viz., "To suggest to the student a method of observation, which seeks to gain a conspectus of all social activities in their interrelations, not scrutinize separately one department of life."

No one would be rash enough to claim that this work as a whole does not contain some chapters that might have been better treated, or that the authors themselves, at a later period, may not desire to modify it, but the merits of a book certainly deserve as much attention as its faults. Early inventions of all kinds are crude, but by using them we learn how improvements may be made; and Professors Small and Vincent would richly deserve the thanks of students, if they had done no more than publish the lists of "Subjects for investigation" which are found at the end of each chapter.

When a book is exactly what it professes to be, no more ought to be demanded of it. It is manifestly unfair to assume that the authors have said all they wish to say upon the subject of sociology in an introductory and elementary work, and then criticise them on that basis. The critics should determine how far an author has accomplished his aims. For being exactly what it claims to be, *An introduction to the study of society* is certainly a successful book.

The present writer made the experiment of using Small and Vincent's *Introduction to the study of society* with a class of seventy students at Indiana University, mostly freshmen. The keen interest of all in observing for themselves

various social phenomena, after the manner suggested in the book, is not often seen. Book II was often mentioned with admiration by the students for its suggestiveness.

Really valuable studies were made by some members of the class, upon several of the subjects suggested for investigation. Three of these deserve special mention: No. 9, p. 234, "A chart and explanation of the channels through which psychical impulses come to a given institution (college)"; No. 10, p. 234, "A chart and explanation of the channels through which psychical impulses go from the same institution (college)"; No. 8 p. 302, "An analysis of the causes which admit ill-trained teachers to the public schools." In the last, each student wrote concerning one or more cases of which he could speak from positive personal knowledge.

GEORGE EMORY FELLOWS

UNIVERSITY OF CHICAGO

English in American universities—By Professors in the English Departments of twenty representative institutions. Edited, with an introduction, by WILLIAM MORTON PAYNE. Boston: D. C. Heath & Co., 1895. 242 p. $1.00.

American newspapers and magazines are showing an active interest in college life and work; particularly, perhaps, in college play. We hear a great deal about athletics, about the picturesque sides of life in college communities, and, not infrequently, about the organization and methods of our "universities," as we are somewhat prone to call them. *Harper's* recently printed a series of articles descriptive of several of our older colleges; other monthlies seem to be drawing from kindred material, and even the daily press goes out of its way to ponder over problems of college ethics or administration which, in other countries or other times, would have been regarded as matters of distinctly local rather than national interest. All this goes to indicate the firm hold that the intellectual training of our young men has on the attention of the people at large. It is good to think that pedants and theorists alone are not directing education, but that the people at large feel directly concerned in it, have suggestions to make and schemes to offer, and insist, with stern common sense, that education in conformity with the greatest and plainest interests of the people shall exist and prosper. Especially is the question of training in the English language and litera-

ture widely discussed and its importance deeply felt. From far and near comes the call for good methods on the part of instructors and earnest effort on the part of students. Of this the present volume is a sign. The Chicago *Dial* has published within a year or two a long series of articles on the teaching of English in American colleges, contributed by representative professors from various well-known institutions. These are now reprinted, with an introduction which surveys the whole field of inquiry, by Mr. Payne of the *Dial*.

The twenty department manifestoes give a very fair idea of English instruction in this country, though we miss reports from Brown, Bryn Mawr, the Massachusetts Institute of Technology, Smith, Vassar, and Williams, to mention only important Eastern institutions, and in at least one notable case, that of Cornell, we have only the most meager information in regard to the whole body of instruction given in English. From an examination of the records given, I should say that there were three points particularly to be noted in the work now going on throughout the United States. First, the degree to which the college study of English is philosophically planned and organized is simply surprising. The day of scattering courses, following the whims of individual instructors, seems to be over. Each branch of study is now treated as a part of the whole group of English studies, in which, and for the good of which, it exercises its peculiar functions. In this necessary organization the Western colleges seem to be stronger than the Eastern. The most broadly and thoroughly planned scheme, that in force at the University of California, is in many respects radically different from the common Eastern type, and deserves the careful study of teachers throughout the country. Second, the fervor with which English studies are pursued is no less extraordinary. At the University of Michigan, for instance, says Professor Scott, "the number of students who elected courses in English the past year, not allowing for names counted twice, was 1198. To this number should perhaps be added 110 applicants for work in composition for whom provision could not be made. The distribution of the electives was as follows: In modern literature, 225; in old and middle English literature, and linguistics, 252; in rhetoric and composition, 721." In other colleges the interest is only proportionately less. Our young men are turning, with a vigor that promises well for our national civilization,

to the study of our own tongue and our own literature. Third, the newborn zeal for the study of literature rather than linguistics is rapidly increasing. The older Germanic ideal is, however, far from being neglected. It is amazing to notice how, even in the most remote parts of the country, philological work is going on, which, so far as its methods go, out-Berlins Berlin, and shows the inexhaustible zeal for the minutiæ of English learning possessed already by our scholars and fostered by them in their pupils. But the love for literature grows apace. "We use no text-books," is again and again the report; "our pupils feed directly on the masterpieces of English literature." Indeed, the movement seems to be toward seeking instruction from men who are critics rather than scholars. It is evident, says the editor, that a professor of English literature "must have a thorough training in the history of criticism, from Aristotle to Pater; that he must have a wide acquaintance with literature, ancient and modern, native and foreign; that he must have a delicately attuned ear and a cultivated æsthetic sense; that, finally, he must have in an unusual degree the power of giving literary expression to his thought, and something like a passion for bringing other minds into sympathetic communion with his own. He should be, in a word, as nearly as possible such a man as Arnold, or Lowell, or Sainte-Beuve, among the dead, or as M. Brunetière, or Mr. Watts, or Mr. Stedman, among the living. Men of this type, or approaching this type, some of our universities already have; the others may obtain them if they will but enlarge their horizon sufficiently to recognize the fact that for the work of giving vital instruction in English literature other than merely academic qualifications are needed; that such qualifications are, indeed, of but secondary importance." If this is what the country as a whole feels, and the reports show traces of a growing tendency in that direction, the next quarter-century is likely to witness radical changes in our whole scheme of English instruction.

It must not be forgotten, however, that such reports as these are necessarily misleading. They are what professors plan to do, not what they do; they are what instructors offer, not what pupils receive. American boys are not Germans; they do not meekly memorize truths dictated to them by authority. They are quick, on the other hand, to appreciate the spirit in which instruction is given them, and to learn more

by the privilege of looking at the world through a professor's eyes than by all the facts or theories he can pile up before them. The question still remains, then, not what are we trying to do, but what are we actually accomplishing. What does the American boy learn, at these twenty colleges, of his own tongue and his own literature, and what kind of man does he become in consequence? What do all this ardent teaching and zealous study add to American civilization? These are legitimate lines of inquiry, which are still to be taken up.

G. R. CARPENTER

COLUMBIA COLLEGE

A complete geography—By ALEXANDER E. FRYE. Boston: Ginn & Co., 1895, $1.25.

Mr. Frye's *Complete geography* is an interesting and important product of text-book work. It has a goodly number of valuable new features that render it attractive and useful, and yet it is sufficiently in touch with old methods and text-book forms to prove practically acceptable to the great body of teachers. It is a book likely to fit the times and present needs in schools. And yet the times are changing so rapidly that another revolution of the wheel may bring it into sight partly out of date.

Thoughtful teachers have been much dissatisfied of late with the geographies in use. But the person who undertakes a new book, especially if it has any radical features, will soon find that he is grappling with larger and larger difficulties. Geography, as popularly conceived, includes nearly everything, and, with so many important and really difficult topics, it is almost impossible to treat them with pedagogical skill in a book of portable size. Then, in order to make a book that will suit all parts of the country, the author is compelled to cut out a general conventional pattern that almost anybody can wear, but that fits nobody very well. It may seem absurd to ask a child in Maine to use the same text-book as another from Louisiana or California, or for a boy from a Colorado mining town to share his lesson with a prairie boy from Illinois, but this is a practical demand. The chief objection of good teachers to the geographies is that they fail to give the children clear and significant ideas and attractive pictures of the world. The books are too general and formal, too dry and verbal. Any book that will help the teachers and pupils out

of the mechanical ruts will be a godsend. Mr. Frye's book is certainly a very helpful and stimulating text, and will do much to awaken a healthy interest in this study. He has met the great difficulties of his task with a large degree of skill and success. I shall first mention some of the points of excellence.

1. One of the chief merits is the controlling influence of a few leading topics. The author has really had a few important things in mind and has kept them steadily in view, one at a time. One of the great difficulties is, out of the mass of materials, to select a few topics of prime importance, and then to neglect everything that does not help to an understanding of them. The discussion of the Western Highlands of North America is an example of such sustained effort. The author has clearly had such centers of thought and has kept within narrow limits. This is a marked improvement.

2. The book contains a body of interesting and instructive information which will appeal to children. In this respect it is decidedly a superior text-book. The trouble with most geographies is that they have reduced to perfection the art of saying important things in the dryest way. This author assumes that children have feelings and sensibilities as well as memories. He evidently surveys a large body of information, and selects those details that at once illuminate the subject and appeal to the thirst for knowledge.

3. In the matter of maps the book contains a series of valuable improvements in text-book work. One of the most striking features is the new set of relief maps. The large map on pp. 34 and 35 is a notable success, and the smaller maps of the same kind distributed through the book are equally valuable. It will be said that it is better for children to make these maps in clay or sand. Very well, but these maps will reveal to them what to make. The plan also of presenting a set of simple maps, with only the more important features, and of following these, at the end of the book, with larger, fuller maps, recommends itself strongly. Again the small maps of the United States, representing separately the different regions of production, as of forests, cotton, coal, wheat, and iron, are one of the best features of the book from a pedagogical standpoint. The map questions are partly of the stereotyped form common in geographies, and partly suggestive of thoughtful comparisons and sequences.

4. In the use of pictures this book has struck out a new line

that will be imitated. The pictures are not only new and attractive, but they are an essential part of the instruction. They are frequently referred to in the text, and the text depends largely upon them for its meaning. These pictures should be studied and discussed in classes as thoroughly as the maps, and the author's own use of them will encourage teachers to do this. In the first survey of the book I was struck with what seemed an overplus of pictures. It seemed like an effort to overdo the "picture business." The book would certainly look better, even to a not very critical observer, if it had fewer pictures. Most of those retained might be enlarged and made more distinct. For example, the large picture of the Westminster Palace at the bottom of p. 160 is much finer and worth more than the group of five pictures at the top of the same page. The smaller pictures are often not clear enough, and yet they will be very helpful to teachers who know how to use them and to interpret by means of them. The grouping of the pictures is also suggestive of comparisons and of an underlying larger thought.

5. The author, as indicated in the preface, does not insist upon any strict order of topics. This is an important concession. Teachers in different parts of the United States should use this book and arrange its materials to suit their own needs.

Cross-references and comparisons are also numerous in the treatment of topics in different parts of the world. This is suggestive to teachers, and will, to some extent, show them how to use a book without being a slave to its text.

There is no doubt that the author would have gladly put in more concrete and illustrative material, if the size of the book had permitted. As it is, the book is probably too large. Mr. Frye's book gives teachers enough of such interesting detail in pictures and in the text to whet the appetite; and a live teacher will go still further in using references, descriptions, pictures, and other collateral aids, not so much for the purpose of adding new facts as for getting a deeper and more lively appreciation of those treated in the book.

I shall next consider a few points of criticism. Mr. Frye's book is an effort to make a geography that will prove acceptable to the schools and to the trade, in all parts of the United States. I have noted the difficulty of this task, and it will grow more difficult every year. In a few years such a thing may indeed be impossible. It is a curious fact that this book

stands by itself in the school course, in strict isolation and independence of other studies. Within the past year or two no idea has given teachers more to think about than the relations between the studies, and geography is generally acknowledged to have more numerous and important relations to all parts of the school course than any other study. But the making of this geography is in no important respect dependent upon the course of study in other branches. Nothing is more clear than that in the re-organization of our school course, now already begun, it will soon be impossible to make out the course of study in any one subject without considering all the others. Geography has many points of contact with all the other studies, and yet Mr. Frye has given us a book which lays out the entire course in geography without the least consideration of what is taught in the other studies during the corresponding years. This book is built upon the old theory that school studies should be kept clearly isolated from each other. The new theory is that they should be joined together by all the patent couplings and linkages. This criticism will not disturb Mr. Frye at present, and yet it will be only a short time before a course of study in geography will have to be made out for the common schools which allows a very strong influence to history, reading, and natural science in determining the selection and order of geographical topics.

Moreover, Mr. Frye's book contains a somewhat full treatment of several important questions which will have to drop out of geography entirely. Such are the large topics on plants and animals (pp. 107–118). As discussed in this book these are almost purely scientific topics, and they will find their place eventually in the regular science lessons. Animals and plants have a good deal to do with geography, but not in this purely scientific form. The topic on Distribution of People (pp. 123, 124) is not geographical but historical, and has no proper place in this book. If American history is properly taught in the schools, this topic may be omitted in the geography. Nor will this mean neglect of the important relations between history and geography. These will find their full opportunity. Much also of what is said about races and religions will drop out for similar reasons. The reason why such topics are now taken up in text-books of geography is that the relations of geography to the other

studies have nct been fixed, and the proper distribution of topics to the different sciences has not been made. The fact is that natural science has had no recognized place in most schools, and geography has dragged a lot of this very interesting material into its own domain and appropriated it. In the new course of study which is being worked out, geography will have to disgorge a good share of its booty and turn it over to the proper owners, history and natural science.

In view of what may be expected in the development of geography as a school study, another important criticism is suggested. It is a question of method in the treatment of important topics. They are usually handled in too abstract and general terms to awaken the thought and interest of children. The statements are too brief and compendious, too condensed and shriveled up, too much stripped of the concrete and graphic detail which alone can arouse the children. Mr. Frye's book is a decided improvement in this respect, but even here he has not yet taken the bull fairly by the horns. His topics (in their beginning) are still too large and unwieldy for the child mind. He needs to work more inductively, from smaller topics to larger ones; beginning first with concrete phases and real types, and working up eventually to the larger generalizations. For example, the whole broad surface-features of a continent, the commerce of the world or of a nation, the broad survey of climatic conditions of winds and rains, all these are too comprehensive and abstract to be grasped at the start from general propositions. And yet they are the very ideas that children must attain to. Teachers seem slow to perceive that the inductive method of gradual approach, through concrete typical illustrations to large general truths, is the true pedagogy of geography as of all other studies. Here is, in my judgment, the principal secret of method, which eludes the scrutiny of so many teachers. Most teachers have never yet lost their faith in general statements as a means of introducing a knowledge of any science.

I do not regard Mr. Frye as one of the great sinners in this respect. Indeed, he has struggled manfully against this powerful tendency of the text-books to generalize ahead of time, and his book is certainly a great improvement over others in this respect. He has still left the main problem to be solved by others.

In spite of these criticisms, which apply to the future rather

than to the present, Mr. Frye's work will be a great help to teachers and schools.

CHARLES A. MCMURRY

NORMAL, ILL.

Gildersleeve's Latin grammar—Third edition, revised and enlarged. By B. L. GILDERSLEEVE and GONZALEZ LODGE. New York: University Publishing Co., 1894. 550 p. $1.20.

A Latin grammar—By CHARLES E. BENNETT. Boston: Allyn & Bacon, 1895. 276 p. 80 cents.

An appendix to Bennett's Latin grammar—By CHARLES E. BENNETT. Boston: Allyn & Bacon, 1895. 246 p. 80 cents.

When the first edition of Professor Gildersleeve's grammar appeared in 1867, it met with a very cool reception from teachers of Latin in general. The traditions of English classical scholarship were still strongly intrenched in American colleges and schools; and these were, if anything, more conservative than in England. Americans were then only beginning to look to Germany for scholarly inspiration and suggestion; and everyone was perfectly well satisfied with what he knew or thought he knew. Into this serenely restful atmosphere Professor Gildersleeve projected his grammar with a bang that profoundly disquieted the nerves of many estimable men. There was an audacity and irreverence about his views, and a certain snap and crackle about the expression of them, quite unknown to classical literature in this country. For a long time, in many quarters the book was looked upon askance as a more or less eccentric production with a very suspicious flavor of heterodoxy about it; and as a result of this, it at first seemed to fall rather flat. Little by little, however, as the point of view of American scholars began to change, Professor Gildersleeve's grammar crept slowly into a place of honor, until at last it was cited side by side with the popular manuals in all discussions that were more than elementary. It was revised and passed into a second edition in 1872, and now comes forth in a sort of triumphant apotheosis, as the most complete and scholarly grammar of the Latin language that America has yet produced.

In the present edition a very large amount of new material has been incorporated, chiefly on the side of historic usage, though the senior editor has here and there modified his earlier views of syntax in the light of the later investigations. A

supplementary note, added to the preface by Professor Lodge, serves to remind one how vast an amount of most productive work has been done in the past twenty-five years, all of which has been utilized in this greatly enlarged volume with its 550 pages of text as against the 384 pages contained in the grammar of 1872. Schmalz, Landgraf, Hale, and Haase in syntax; Seelmann in pronunciation; Brugmann in morphology; Gleditsch, Klotz, and Plessis in prosody—these are but a few of the names that serve to indicate the stores upon which Professor Lodge has drawn for the enrichment of this manual. In the orthography, Brambach has been largely followed; and in the marking of the natural quantities, Marx is accepted as a standard, which is perhaps the best thing that the editors could have done in a field where so much is still left to the imagination.

This is, of course, not the proper place for a consideration of the various technical questions suggested by a perusal of the book. A comparison of it with the preceding editions will show that many of the editor's earlier dicta have been modified, but much less than one might have expected. In some cases, views which were in 1872 regarded as novel and perhaps erratic, have secured a general acceptance. Especially satisfactory to the classical student will be found the new section on prosody and versification, which covers the field of the early Latin, and includes the latest theories on the Saturnian. Somewhat disappointing is the very meager treatment of the Latin accent, occupying only a few lines of minute type; and so, too, is some of the etymology, from an historical point of view. A page or two with reference to the other dialects of Italy would have given a greater completeness to the work, and would have been in line with the requirements of modern scientific teaching. The typography and mechanical execution of the volume are very attractive, and make its use agreeable to the eye.

Some six months ago the present writer expressed in these pages the hope that before long a Latin grammar might be written that should embody only the essentials of the subject, casting aside altogether the disheartening mass of rubbish and repetition that so often appall the beginner and drive him shuddering into an Ollendorf or the arms of a professor of the so-called "natural" method of teaching languages. The opinion was then hazarded that such a grammar could be written

within the compass of a hundred pages. Professor Bennett's attractive little volume, whose appearance fulfills the hopes that were then expressed, extends to 265 pages, but as they are not large and are printed in a plain, clear type, well "leaded," the editor may be said not to have exceeded a proper limit. Teachers of Latin, especially in the secondary schools, will welcome the book as one of the many contemporary indications of the dawn of an era of good sense in the teaching of the classics. Here is everything that a preparatory student ever needs in the way of grammatical information, clearly and concisely put, and with not an unnecessary line or a superfluous rule. It is wholly modern in its teaching, accurate beyond any reasonable criticism, and is evidently the work of one who very happily combines ample scholarship with the experience of a practical teacher.

The condensations have been effected principally in the omission of the innumerable exceptions that clog the pages of the larger grammars and thus too often give an unmerited dignity to the mistakes of the ancient writers by teaching the student to regard them as subtle and sacred things; in omitting from the body of the grammar the usual discussion of the order of words; and by a very great brevity in the treatment of the prosody and versification, from which are omitted even the meters of Horace and Catullus. The historical element is also wholly excised. All this condensation, so far from proving a source of error to the student, is a positive gain, since he will now at once perceive the essential simplicity and symmetry of the language, and will find no excuse, as heretofore, for complaining that he cannot see the wood by reason of the trees. In twelve pages, placed at the end of the book, Professor Bennett has summarized with admirable lucidity the more essential points relating to the order of words and the general subject of Latin style—a section that is most helpful and instructive.

Of even greater interest and value is the Appendix to the Grammar, which is issued as a separate volume, and which is especially intended for the use of teachers. In it Professor Bennett takes up certain questions that have, in the last ten years or so, come into great prominence in the study of Latin, and that have heretofore not been set forth collectively in a simple form. These topics are the pronunciation of Latin, the determination of "hidden" quantities, accent,

the subject of disputed spellings, the phonetics of Latin, the inflection of the language, and certain questions of syntax whose discussion was of necessity omitted from the body of the Grammar. It is no exaggeration to say that so compact, helpful, and practical a collection of indispensable information cannot be found elsewhere in any language whatsoever. Even in Germany, the home of classical enchiridia, nothing has yet appeared that is so satisfactory. Professor Bennett seems to divine by instinct just what questions arise in the mind of the student, and he here answers them in advance in a delightfully lucid and simple fashion. To teachers, and especially to those teachers who do not read German with facility, the chapter on hidden quantities will prove the most valuable and timely feature of the book in view of the prominence that is now given to the subject, even in the preparatory schools—a somewhat faddish prominence, in the opinion of the present writer, but one that cannot be ignored by the teacher whose motto is *Soyons de notre siècle*. Professor Bennett very properly takes issue with Marx on a number of his dicta as to the length of syllables; and whereas in the Grammar, the vowels are marked in accordance with Dr. Lewis's dictionary, in the Appendix the author's own convictions and conclusions prevail in all the markings. Everywhere the best authorities are cited, and it is certain that to many teachers as well as students the mere perusal of this little manual will open up many new vistas, and will put them in touch with the most scholarly doctrine of the day. In fact, the book is one that no progressive instructor can afford to be without, as it summarizes an immense amount of information that is of the utmost practical importance.

These three books, taken together, are a most valuable contribution to classical scholarship, and are the best kind of evidence that the study of the classics, so far at least as Latin is concerned, is by no means losing its hold upon the attention of American scholars; but that its claims are likely to be more and more fully recognized in the future, as its advocates bring to bear on its behalf an irresistible combination of sound learning and practical good sense.

HARRY THURSTON PECK

COLUMBIA COLLEGE

VIII

EDITORIAL

With the adoption of the recent amendments to its constitution,[1] the National Educational Association may fairly be said to have entered upon a new career of usefulness and importance. Since attaining national significance in 1884, at the Madison meeting, the Association has gained a commanding place in the affections of the teachers of the country. Its truly national character, its catholicity, and, more lately, the passing of the political element, have served to attach to it the most earnest and representative instructors in the country, whether their own personal work lies in a kindergarten or in a university. The service that the Association is rendering and has rendered to the cause of education can hardly be overestimated. Its funds have been liberally appropriated in support of educational conferences and investigations, and the Reports of the Committee of Ten on Secondary School Studies and of the Committee of Fifteen on Elementary Education have already become educational classics. That the forthcoming Report of the Committee of Twelve on Rural Schools will be of similar weight may be confidently predicted.

With so large and complex and influential an organization under full headway, it is not to be wondered at that those officially charged with the responsibility for its guidance should be conservative and cautious. It may not always be possible to collect a large annual income, through the railroads, from the associate members, as is now done. Already grave difficulties are encountered in making the arrangements necessary to continue the present policy. The Association must eventually be in a position to carry on its work, independently of the varying income received from associate members. To make this possible the invested funds should be not less than $100,000. They will soon amount to something more than half of that sum. With a permanent and assured income of $5000, the work of the Association would be secure.

[1] EDUCATIONAL REVIEW, X: 197.

Sometimes the suggestion is made that the Association ought to purchase a permanent headquarters and hold all its meetings there. Such a proposition is ill-considered and not to be entertained for a moment. A large part of the benefit wrought by the large annual meetings is due to the stimulus given to the section in which the meeting is held, and to the broadening of view and of intellectual horizon of those who travel some distance to attend. No price is too great to pay to secure the continuance of these advantages. New Jersey and Colorado will long show the good effects of the great meetings at Asbury Park and Denver.

Readers of the EDUCATIONAL REVIEW are already aware of the struggle carried on last winter for public-school reform in New York City, and of its outcome.[1] It is probable that the fight will be renewed before the next legislature, and continued until the Platt-Tammany combination and their allies, the teachers' "ring," are beaten. The great importance of the issues involved is ample justification for reproducing here, for the information of readers in other parts of the country, an editorial on the existing situation that appeared in the New York *Evening Post* for October 2. It is safe to say that that newspaper reflects accurately the sentiments on this subject of nine-tenths of the intelligent and independent citizens of New York City. The article in question is the following:

The announcement that the Board of Education proposes to submit a new school bill to the next legislature may serve to remind those citizens with short memories that the Committee of Seventy's school-reform bill failed to pass the Senate of 1895, and that substantially the whole ground of school reform must be gone over again. In removing some of the worst of the Tammany commissioners, and in his admirable selections for school inspectors, Mayor Strong has contributed not a little to the improvement of the old order of things. The ward trustees recently chosen are of a much higher type than their predecessors, and some of them are ideal appointments. President Maclay and his associates have also been energetic in planning for new and adequate school buildings and in putting the older structures in decent order.

But the Board of Education, the ward trustees, the inspectors, and the buildings may all be of the best, and the schools may still remain the same listless machines that they have been for a generation. Not many members of the present Board of Education are competent critics of the details of school work, and not many of them would know just what steps to take to

[1] EDUCATIONAL REVIEW, X: 98.

improve the educational efficiency of the schools, were their shortcomings clearly understood. Commissioners Peaslee, Hubbell, Prentiss, and one or two more have had the training and experience necessary to enable them to take the lead in this matter, but whether they could command a majority of the present board for their proposals is quite uncertain.

Experts and intelligent observers generally are agreed that what the New York public schools most need is enlightened and authoritative supervision. And school supervision in the modern sense means intellectual leadership and guidance, as well as the performance of the routine that in this city is officially supposed to be sufficient. Such supervision as Cleveland has—as Denver, St. Paul, St. Louis, and Brooklyn have—is not possible in New York under the provisions of existing law. With twenty-four local, or ward, boards of education to contend against; with their jobbery, their favoritism, and their susceptibility to local "pulls," no superintendent of schools can freely and authoritatively supervise. The Superintendent must be clothed by law with the power that is the necessary accompaniment of his responsibility. He must be able to keep poor teachers out of the schools, and to weed out promptly the inefficient and the ignorant. The entire educational oversight must be his, and his alone; subject, of course, to appeal to the Board of Education in matters affecting personal rights. Where the best schools are to be found, there the Superintendent possesses most power, although he may make but little parade of it.

With the ward trustees out of the way, with one central responsible Board of Education clothed with full power, and a superintendent whose duties were clearly defined by law and supported by the by-laws of the Board of Education, the way would be open to resuscitate the public schools of this city. The next step would be the selection of a competent superintendent, for probably no one whose judgment is worth having considers Mr. Jasper a competent or even a creditable incumbent of that office. At least one-half of his staff of assistants are men of like caliber with himself, and would never have reached their present positions except through political influence. It is one of their professional jokes that "to get and hold on to eleven votes"—that number being a majority of the Board of Education—is the chief aim of their official existence. These people should all be swept away by any board that calls itself a "reform board." The natural assistant superintendents of schools are the principals, each of whom should be a direct subordinate of the superintendent and be held responsible for carrying out the instructions to the letter. Competent supervisors of special departments, such as kindergarten, drawing, music, and physical training are desirable and necessary, but the assistant superintendent, as he exists at present, can be easily spared.

The moment that a competent and experienced superintendent made a tour of the schools he would discover that they lack high ideals, modern scientific information, and the spirit that is so significant in many of the Western cities. He would find that the average New York teacher is not a student and not a reader of the literature of her profession. He would find no traces of other than a statistical supervision of the schools. He would find, in short, not a system of schools at all, but a haphazard collection of ward schools, some of them very poor, some of them fair, but very few of

them wholly satisfactory. The first task of such a capable superintendent as we have in mind would necessarily be to gather the principals and teachers about him for instruction and inspiration. A fairly educated clerk could keep the statistics of his office; but no one save a trained scholar and an experienced superintendent can ever hope to rouse the teachers from their lethargy and their machine methods. Such work as Superintendent MacAlister did ten years ago in Philadelphia would have to be repeated here. As was the case there, many of the principals and teachers would doubtless hang back, hoping that the reform wave would pass over and the old status be restored. But much could and would be accomplished. After ten years of such an administration the schools would be metamorphosed.

One suggestion that is known to have supporters among the members of the Board of Education is the one for a paid school commission that was embodied in the preposterous Bell bill of last winter. The real paid commissioners ought to be the superintendent and his staff of supervisors and the superintendent of buildings. All detail work should be theirs. To associate with them paid commissioners would be to invite interference and controversy, and to perpetuate the evils that it is sought to avoid by abolishing the ward trustees.

Among the New York Good Government Clubs, Club E has paid most attention to the public schools. This is due largely to the intelligent and sympathetic interest in education taken by the club's president, Mr. J. Augustus Johnson. Under Mr. Johnson's direction an important report has recently been published by Club E that reviews the reforms accomplished and set in motion since Mayor Strong took office, makes recommendations as to further improvements, and prints some exceedingly interesting statistical tables. It is work of this sort that will eventually redeem the New York city school system. An aroused and enlightened public opinion will refuse to submit to the bossing of the schools by local politicians and organized bands of inefficient principals and teachers. It is significant that both New York and Philadelphia, the only two large cities in which ward school boards exist, should be trying to free themselves from the system, and that in both places no inconsiderable number of teachers are found who join the politicians in defending the existing abuses.

It is announced in the public press, presumably on good authority, that Dartmouth College proposes to develop courses designed to prepare students for the degrees of M. A. and Ph. D.—in other words, that Dartmouth aims to become a university. If the report is true, the fact is greatly to be de-

plored. As a typical American college, doing legitimate college work, Dartmouth has long since won a high place on the roll of honor. But as a university, inviting comparison with Harvard, Columbia, Johns Hopkins, Chicago, and Cornell, her resources would be very scanty. Her graduates could do far better, in almost every instance, by pursuing their advanced studies at a foreign or American university, than by remaining at Dartmouth for a post-graduate course. And what is true of Dartmouth is true of a hundred other colleges as well. Much wiser was the determination lately arrived at by Vassar College, under the lead of President Taylor. That institution, while providing attractive opportunities for a year's study by resident graduates, distinctly disavows any thought of entering upon the work of a university.

One good effect of the new compulsory education law in New York State has been to compel the transfer of the Institution known as the Truant Home in Brooklyn from the control of the Board of Aldermen to that of the Board of Education. The police magistrates had been in the habit of committing to this institution not only habitual truants but vagrants and young criminals of all kinds. Thus children whose only fault was truancy were compelled to associate with criminals and, doubtless, to learn the lessons of crime. Nor was this all. Under the management of politicians the Home had been conducted as a penal, not a reformatory, institution; for the benefit of the managers and their employees, and not for the benefit of those committed to their care. When it came under the control of the Board of Education, the sleeping quarters of the boys were found to be comfortless in the extreme; the dining room in an unwholesome cellar; the kitchen arrangements repulsive to the last degree; the bathing and other sanitary arrangements wretched; and books or anything else to relieve the tedium of the prison-like life conspicuous by their absence. The process of transforming the whole character of the institution will necessarily take time, but has already commenced. The building is being thoroughly renovated and made clean and wholesome. A library of cheerful reading is being collected. New dining rooms, kitchens, and workshops are to be added. Proper facilities for instruction will be afforded. Each boy will be

given a plot of land to cultivate as a garden. In short, everything possible will be done to render the Brooklyn Truant School—as it will be called hereafter—an institution in which boys who proved incorrigible in the public schools will be surrounded by those influences and subjected to that discipline which promote strength of character and inculcate self-respect and respect for the rights of others.

In the tragically sudden death of Professor H. H. Boyesen, not only Columbia College but the entire country suffers a severe loss. Professor Boyesen's scholarly studies and confining literary work had enriched rather than diminished his abundant store of human interest and enthusiasm, and he was one of the strongest links between the university life of America and the great world outside of academic walls. By his writings and his lectures he had reached an immense audience scattered through the whole United States, and had aroused in them an appreciation of literature and literary art. In the classroom he was extremely popular, and his interpretation of Goethe's *Faust* was a course that no serious Columbia undergraduate was likely to miss. The men who, like Professor Boyesen, serve both their own institutions and the country at large are far too few. Every university should seek out some such men, and make it easy for them to exercise their talents freely. Such a service is one of the highest and most useful that a modern university can render. For fifteen years Professor Boyesen has made the name of Columbia College familiar to thousands, and his peculiar place will not be filled.

For the Jacksonville meeting of the Department of Superintendence, to be held on February 18, 19, and 20, Superintendent Jones has planned a very rich programme, and it is quite safe to say that several hundred members of the Department will make the journey to Florida to hear it. Problems of detailed supervision, The rural school question, Co-ordination of studies, and Ideals in education, are the topics to occupy the morning and afternoon sessions. Among the speakers appear the names of Commissioner Harris, Professor Hinsdale, President De Garmo, Principal Lyte, President Baker, Professor E. S. Joynes, and Superintendents Treudley

of Youngstown, Phillips of Birmingham, Reinhart of Paterson, Sutton of Houston, Gordon of Camden (Ark.), Gilbert of St. Paul, Inglis of Illinois, Cooper of Galveston, and Whitney of East Saginaw. The evening addresses are to be by President Schurman of Cornell, Miss Elizabeth Harrison of Chicago, and Dr. J. L. M. Curry of Washington. On Thursday afternoon an important series of Round Table discussions are planned.

On the 11th and 12th of October the New England Association of Colleges and Preparatory Schools held its tenth annual meeting at Brown University. The service of this body—the earliest of its kind—in bringing into close working companionship teachers in college and teachers in preparatory schools is a matter of general knowledge. Its members meet, not merely for the purpose of hearing good papers on interesting educational themes,—a purpose laudable enough in its way,—but more especially for the furtherance of some specific interest common to school and college. In consequence their proceedings are always marked by directness and definiteness, and usually, also, by practical results. The recent meeting was not an exception to this general rule.

There were in attendance about two hundred members and guests (for the meeting is only semi-public), an audience thoroughly representative of the colleges and secondary schools with which New England abounds. There were men and women from the large universities and small colleges, and from high schools and endowed academies. The discussions were correspondingly earnest and thoughtful, and repeatedly reflected valuable experience in actual instruction.

The first session was occupied with the subject of college requirements in history. Before the Association were certain resolutions presented by a conference on history requirements, which was organized last winter by the Executive Committee at the request of Professor Start of Tufts College. These resolutions were supported by a printed report, signed by the members of the conference—Dr. Huling, Professors Coman, Hart, and Start, and Miss Thompson. The discussion began with an admirable paper by Professor Albert Bushnell Hart of Harvard, in which he gave reasons for the acceptance of the improvements in methods of study and of examination provided for in the resolutions.

Mr. A. L. Goodrich of Salem followed, favoring the resolutions in the main, but pointing out some difficulties in the application of them to school work. The debate was participated in by Professors Channing, Hart, and Start; Drs. Tetlow, Hill, Keep, and Huling; Messrs. Fish and Fox, and Miss Whipple. Some of the speakers manifested concern lest the time and difficulty of preparation in this subject should be unduly increased, but in general the opinions expressed were favorable to the tenor of the resolutions. Certain modifications, suggested by Dr. Tetlow, were accepted by the chairman of the conference, and the resolutions were then adopted by the Association, by a vote of 35 to 7, in the following form:

I. RESOLVED, That the colleges be requested to include in their requirements for admission a choice of subjects out of the following topics: (1) The history of Greece to the death of Alexander, with especial reference to Greek life, literature, and art. (2) The history of Rome, the Republic and the Empire to the accession of Commodus. (3) German history, to be so taught as to elucidate the general movement of mediæval and modern history. (4) French history, to be so taught as to elucidate the general movement of mediæval and modern history. (5) English history, with especial reference to social and political development. (6) American history, with the elements of civil government. (7) A detailed study of a limited period, pursued in an intensive manner—any two of these topics to constitute a required subject for entrance to college. The colleges are earnestly requested to accept any additional topic or topics from the list as additional preparation for entrance or for advanced standing.

II. RESOLVED, That satisfactory written work done in the secondary school, and certified by the teacher, should constitute a considerable part of the evidence of proficiency required by the college.

III. RESOLVED, That such written work should include some practice in at least three of the following: (*a*) Notes and digests of the pupil's reading outside the text-books. (*b*) Written recitations requiring the use of judgment and the application of elementary principles. (*c*) Written parallels between historical characters or periods. (*d*) Brief investigations of topics limited in scope, prepared outside the classroom, and including some use of original material. (*e*) Historical maps or charts, made from printed data and comparison of existing maps, and showing movements of exploration, migration, or conquest, territorial changes, or social phenomena.

IV. RESOLVED, That the examinations in history for entrance to college ought to be so framed as to require comparison and the use of judgment on the pupil's part, rather than the mere use of memory. The examinations should presuppose the use of good text-books, collateral reading, and practice in written work. Geographical knowledge should be tested by requiring the location of places and movements on an outline map.

At the evening session, in the absence of President Schurman of Cornell, detained by illness, Professor William Morris

Davis of Harvard gave an earnest address on "Physical geography as a subject for admission to college." He described the study in its modern form, showing how greatly it had changed, how vigorous and valuable a discipline it could develop, and how large is its inherent worth. He also outlined the method of examination that should be employed in it, partly by written test, partly by laboratory work, partly by the reading of note-books, and partly by field work. No formal discussion was had, but in the social gathering of a most enjoyable nature which followed, it seemed to be generally conceded that Professor Davis had made out a strong case for his subject.

At the morning session, the next day, the old officers were re-elected, forty-six new members were chosen, and other routine business transacted. Later there were taken up for consideration certain statements of requirements in Latin and Greek, and certain programmes for preparatory study in those subjects, which had been proposed by the Commission of Colleges in New England on Admission Examinations in their ninth annual report, recently issued. The propositions were considered first from the point of view of the principal of a large school by Mr. Charles C. Ramsay of Fall River, and then from that of a college teacher of the classics by Professors John K. Lord of Dartmouth, and Frank E. Woodruff of Bowdoin. In the subsequent discussion Professor A. G. Harkness, and Drs. Bancroft, Keep, Tetlow, Gallagher, and Peck took part. It was a charming debate, made more delightful by the opening of the windows of their schoolrooms, so to speak, by some of the speakers, so that all present could look in and see the actual daily practice of these master-workers in preparatory instruction. In general, the propositions of the Commission met with distinct approval, though some minor differences were apparent. There seems to be a ground here on which practical accord in preparatory classical study and substantial uniformity in requirements are possible and probable. As the subject is still under consideration by the Commission, no formal action was taken by the Association.

During the morning a report was made by the delegates to the Conference on English Requirements. This was the occasion of the expression by Mr. Fox of some objection to the particular works of literature selected by that Conference

and to the increase of preparatory work involved. The discussion did not, however, become general. At another point in the meeting the unrest prevailing concerning entrance requirements found expression in certain resolutions offered by Mr. James Jenkins of Worcester, as follows:

RESOLVED, That the colleges be requested to include in the list of subjects which may be offered for admission physics, chemistry, biology, and physiography, which subjects are now taught in many high schools.

RESOLVED, That in every subject there be an elementary and an advanced requirement.

RESOLVED, That elementary English and elementary mathematics, together with either one ancient or one modern language (other than English) as an advanced subject, be required of all.

RESOLVED, That out of the total number of subjects named by the colleges for admission, the individual pupil be required to present himself in a limited number of elementary subjects and not more than three advanced subjects.

RESOLVED, That for the A. B. degree at least two languages other than English be required.

These resolutions were not debated but were referred to the Executive Committee. It is probable that in some form they will be taken up for discussion at the next meeting. The spirit in which they are offered, namely, the desire that English high schools and, in general, the courses in secondary schools not now preparatory to college, should receive recognition at the college doors, is widely prevalent among the members of the Association, and is likely to be an important factor in the settlement of the questions which cluster about admission requirements, and are pressing for solution. That solution will surely be hastened by the cordial co-operation between the representatives of the two sets of interests involved which is always manifest at the meetings of this body, and has already been mentioned as one of the richest fruits of its ten years of activity.

The great work on the universities of the Middle Ages, by Mr. Rashdall of Oxford, which has been long expected, is definitely promised to appear this winter.

At a recent public hearing before a committee of the New York Board of Education, on the subject of the reform of the system, a ward trustee, whose facility of speech was alarmingly out of proportion to his power of thought, connected or

disconnected, declared, with a sob in his voice, that, after critically examining the system from top to bottom, he found "everything to praise, nothing to condemn." Superintendent Jasper, who followed, was more cautious. He admitted the existence of defects, but did not specify them. He stated with great emphasis, however, that the New York public schools had always led the van of progress, and, as his first bit of evidence, cited the fact that the New York teachers had been the first to organize a mutual benefit association.

The Executive Committee of the National Educational Association met at Chicago on October 19, and the place of meeting in 1896 was carefully considered. Asbury Park, Boston, Buffalo, Duluth, and Los Angeles tendered invitations. The general sentiment of the Association seems to be that it is unwise to go to Los Angeles so soon after Denver. It is claimed that Duluth has no proper accommodations for the meeting. Asbury Park is a very popular place, but will hardly be chosen so soon again, since the 1894 meeting was held there. The final decision, therefore,—to be reached at an adjourned meeting at Atlanta, on October 26,—is likely to favor either Boston or Buffalo. At either point a warm reception and an enthusiastic meeting are assured. Boston is the first choice of the Committee, if proper railroad arrangements can be made.

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